Shortchanging the Joint Fight?

An Airman's Assessment of FM 3-24
and the Case for Developing
Truly Joint COIN Doctrine

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Introduction

Anybody who thinks that you can win these kinds of things
in one dimension is not being honest.

Gen Peter Schoomaker, USA
September 2006[1]

Is America's counterinsurgency (COIN) effort being shortchanged? Does a one-dimensional doctrine fail to exploit America's full COIN potential? Would a genuinely joint approach provide better options to decision-makers confronted with the harsh realities of twenty-first century insurgencies?

This study insists the answers are unequivocally "*yes*." It analyzes the pitfalls of accepting Army/Marine tactical doctrine as the *joint* solution. It also offers insights and ideas from an Airman's perspective for strengthening joint COIN doctrine development in order to deliver fresh alternatives to our national decision-makers and combatant commanders.

Of central importance to this assessment is the Army's December 2006 Field Manual (FM) 3-24, *Counterinsurgency* (designated by the Marine Corps as Warfighting Publication 3-33.5).[2] This impressive and influential[3] 282-page document skillfully addresses many difficult COIN issues, but regrettably reflects a one-dimensional, ground-centric perspective almost exclusively, as evidenced by the fact that considera-tions of airpower are confined to a short, five-page annex.

By failing to reconcile the full potential of today's airpower capabilities and by focusing almost exclusively on the surface dimension, FM 3-24—

despite its many virtues and remarkable insights—nevertheless falls short of offering US decision-makers a pragmatic, *overall* solution for the challenge of counterinsurgency.

Yet, despite FM 3-24's limitations, it has become viewed as the overall plan for COIN operations in Iraq.[4] Of further concern are reports that FM 3-24 appears poised to become the centerpiece of new *joint* COIN doctrine whose development has just begun.[5] This paper argues that winning COIN fights requires exploiting the potential of the entire joint team.

Simply Two-Service Doctrine or "The Book" on Iraq?

One FM 3-24 contributor insists that it is "simply operational level doctrine for two Services [with] no strategic agenda."[6] Of course, there is absolutely nothing wrong with services or components developing doctrines and approaches that optimize their capabilities,[7] or even taking positions that single-service/component solutions are best in specific situations.[8] In fact, the evidence of "one-dimensional" success sometimes can be strong. According to Tom Ricks' book, *Fiasco*, it was 1998's airpower-only Operation Desert Fox bombing campaign that ended Iraq's hopes of a nuclear weapons program.[9]

However, counterinsurgency operations arguably present a more difficult and multifaceted problem that defies solution by any one component. Despite the ferocious efforts and eye-watering valor of America's Soldiers and Marines, [10] the various COIN strategies for Iraq proffered by ground-force leaders over the years simply have not succeeded.[11] Exploiting the full capabilities of the *whole* joint team is plainly—and urgently—needed.

Clearly, FM 3-24, the latest ground-force scheme for Iraq, is being understood as much more than the doctrine of "two Services." As the media reports, it has become "The Book" on Iraq.[12] More than that, Senator John McCain typifies the view of many senior leaders (and probably the public at large) in describing the manual as the "blueprint of US efforts in Iraq today."[13] Thus, despite its inadequate treatment of

airpower, "received wisdom" holds that FM 3-24 is a *comprehensive* solution applicable to the whole joint team conducting COIN operations in Iraq.

Such assumptions are understandable, and not just because a ground-centric DOD announcement wrongly insinuates just such a conclusion.[14] FM 3-24 is not, for example, entitled *Landpower in Counterinsurgency Operations*, but simply *Counterinsurgency*. More importantly, FM 3-24's preface does not describe it as doctrine aimed merely at ground operations, but grandly characterizes the manual—without limitation or qualification—as doctrine for "military operations" in "counterinsurgency… environments."[15]

This description certainly includes all operations in Iraq,[16] but the doctrine evidently is not intended to be limited to that conflict. While acknowledging its application there, Dr. Conrad Crane,[17] a highly-respected historian who was one of the principal authors, makes no secret that FM 3-24 is intended for broader application: "If we'd have written a manual that's only good for Iraq, we'd have failed in our mission."[18]

Service Parochialism or Airman Disinterest in COIN?

Does this mean Airmen ought to dismiss FM 3-24 as simply a symptom of service parochialism? Some may say so. In discussing airpower, a recently retired Army chief of staff said he "believe[s]" in it, but nevertheless did not seem to consider it as an independent, co-equal force.[19] Rather, he evidently views airpower as merely a kind of accessory for Soldiers that is "on the other end of the radio when you need something done in a hurry."[20] Contending it is "easy" to overstate what is "possible" with airpower, he mocked those who "love things that go fast, make noise and look shiny."[21]

Apparently, the ground component sees counterinsurgency as its near-exclusive domain. For example, FM 3-24 incorrectly claims that such capabilities as "language specialists, military police … engineers, medical

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units, logistical support, legal affairs [and] contracting elements" exist only "to a limited degree" in the Air Force and the Navy.[22] Such an assertion is either grossly misinformed—the likely explanation—or, it might be said, deliberately provincial.

Still, it would be a great mistake to attribute FM 3-24's overwhelmingly ground-centric approach to service parochialism. Until very recently, the Air Force has not offered much in the way of doctrine or other comprehensive analysis focused exclusively on counterinsurgency.[23] Attitudes within the Air Force may be changing. As an example, the Air Force Doctrine Center "jump started" an effort to write service COIN doctrine by addressing these operations within the broader context of irregular warfare (IW).[24] The result was published in August 2007 as Air Force Doctrine Document (AFDD) 2-3.[25] In support of this effort during April of 2007, Air University sponsored a major counterinsurgency symposium.[26] There, Maj Gen Richard Y. Newton III, the Air Force's assistant deputy chief of staff for operations, plans and requirements, declared the Air Force needed to "acknowledge and embrace COIN and IW as major missions."[27]

Nonetheless, with some notable exceptions, too few Airmen have been effective and articulate advocates of airpower generally,[28] especially in recent years.[29] Accordingly, it might be expected that most in the land component, including those involved in COIN, see the Air Force as merely an adjunct to their operations and "incapable of winning a decisive victory or even controlling events on the ground."[30] After all, it is a basic Army belief that an enemy force can "endure punishment from the air" but cannot "ignore the application of military force on its own land."[31]

The shortage of thinking about the role of airpower in COIN is not new. As early as 1998, Col Dennis Drew argued that "to a large extent, the Air Force has ignored insurgency as much as possible, preferring to think of it as little more than a small version of conventional war"—a view many

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observers believe persists today.[32] In the summer of 2006, Dr. Grant Hammond of Air University lamented that there is a "general disinterest" in COIN among Airmen.[33]

The reasons for this apparent aversion to COIN are debatable, but a 2006 RAND study reveals a plausible rationale. It observes that historically "insurgencies do not present opportunities for the overwhelming application of the air instrument."[34] Accordingly, "air power has been used in a less-visible supporting role."[35] Most analysts to date seem to agree with this "supporting role" assessment. The bulk of COIN literature,[36] to include much authored by Airmen, rarely offers innovative ideas for a more expansive use of airpower.[37]

By contrast, the Army and Marine Corps have done a lot of thinking about COIN in the past few years. Both services did an outstanding job in assembling a team of some of the nation's top ground-warfare experts to develop FM 3-24. These included such formidable intellects as Col Peter Mansoor[38] and LTC John Nagl[39]—both Army officers with PhDs to complement their extensive combat records. Nagl, for instance, is the gifted young author of the extremely well-received book, *Learning to Eat Soup with a Knife: Counterinsurgency Lessons from Malaya to Vietnam,*[40] which is one of the primary texts the manual's writers relied upon.

The entire effort was supervised by yet another respected PhD-warrior, "one of the Army's premier intellectuals,"[41] an individual "skilled" at "befriending journalists,"[42] and someone with "many friends in Congress,"[43] Gen David H. Petraeus, who is now implementing FM 3-24 as the commander of the Multinational Force in Iraq.[44] Yet, despite this enormous collection of talent and the many vitally important insights and concepts they incorporated into FM 3-24,[45] the doctrine produced is nonetheless *incomplete*.

FM 3-24 as an Incomplete Doctrine

How is FM 3-24 an incomplete doctrine for the problem of counter-insurgency? Among other things, it "undervalues technology, misunderstands key aspects of twenty-first century warfare and, frankly, marginalizes air power."[46] To address these deficiencies (specifically in light of the nascent work toward developing comprehensive joint COIN doctrine), this essay argues that several central concepts about airpower—and Airmen—ought to inform COIN doctrine and strategies in order to realize the full benefits of a joint and interdependent team.

This essay also takes the view that a truly *comprehensive* and joint COIN doctrine would necessarily emphasize recent developments in airpower technology and techniques. Taken together, they make obsolete the attitude permeating FM 3-24 (as well as most other COIN writings) that always relegates airpower to a tangential "supporting role."[47]

Today's airpower (in contrast to the then existing airpower capabilities in many of the classic COIN efforts FM 3-24 relies upon) *can* be a decisive element in a truly joint COIN strategy. Because it offers opportunities to replace manpower with technology, airpower may, in fact, be essential to forming genuinely *pragmatic* options for American decision-makers confronted with the kinds of intractable insurgencies that mark the twenty-first century.

Importantly, when this monograph speaks of "airpower" it does not employ the somewhat outdated official Air Force definition,[48] but rather takes its meaning from the Air Force's current mission statement to include air, space, and cyberspace power in all their many forms.[49] A caution: this reference to the Air Force's mission statement does *not* mean that airpower should be read exclusively to mean the US Air Force. Although the United States has only one Air Force, the *air and missile arms* of other services are vital elements of American airpower.

Airmindedness

A key thesis of this study is that the value of an Airman's[50] contribution to the counterinsurgency debate is not limited to airpower capabilities, *per se*, and does *not* depend upon the existence of "opportunities for the overwhelming application of the air instrument" in particular COIN scenarios.[51] Yes, Airmen do bring distinct weaponry to the COIN fight, but equally—or more—important is the Airman's unique *way of thinking*.

Gen Henry H. ("Hap") Arnold termed the Airman's "particular expertise and distinct point of view … *airmindedness*."[52] According to Air Force doctrine, an Airman's "perspective is necessarily different; it reflects the range, speed, and capabilities of aerospace forces, as well as the threats and survival imperatives unique to Airmen."[53] An Airman's approach to military problems, including COIN, may differ markedly from that of a Soldier.[54] Taking advantage of the Airman's way of thinking will optimize joint COIN doctrine because, among other things, the Airman is less encumbered by the kind of frustrations the ground forces suffer in battling a vicious and intractable foe without the expected success.

True, some counterinsurgency operations in certain circumstances are optimally executed by ground forces as FM 3-24 promotes.[55] The design of even those operations, however, *always* ought to reflect careful consideration of not just the technology and capabilities of the whole joint team but also the unique war-fighting perspective each service and component brings to the analysis.

Authentic Jointness?

Possibly as a result of Airmen's criticisms of FM 3-24, a forum to bring all the services' COIN perspectives together may be emerging.[56] In late May 2007, over five months after FM 3-24 was declared The Book on Iraq, the four military services agreed to publish *joint* COIN doctrine.[57] This development presents the ideal opportunity to meld the strengths of the whole joint team into a unified doctrinal concept.

Significantly, *Inside the Pentagon* announced that the "Army will lead the pan-service effort."[58] Alone, this is not problematic; however, it does raise concerns when juxtaposed with the further report that "several officials" said that FM 3-24 will serve "as a primary building block for the new service-wide effort."[59] It remains to be seen what a doctrine development architecture so constructed will produce.

With the Army leading the effort and the express intention to rely upon the Army's existing counterinsurgency doctrine as a "primary building block" for the new joint doctrine, the issue is whether the process will be sufficiently open to innovative concepts, especially those that might contradict any of FM 3-24's central tenets. Ideally, the process should focus on competitive analysis of component approaches, and select those elements that will serve the COIN fight best.

A *complete* COIN analysis for implementation in the joint environment must benefit from an *airminded* perspective. That means taking into account the potential of airpower technologies as well as the Airman's distinct approach to resolving issues across the spectrum of conflict. In short, a *fully* joint and interdependent approach will produce the most effective doctrine for the COIN fight.

FM 3-24's Ground-Force Conventionality

Soldiers praise FM 3-24 as "brilliantly" created,[60] a proposition with which Airmen would agree. Airmen, however, would also find that its defining provisions espouse rather standard ground-force philosophies. In fact, what is paradoxical[61]—given the publicity surrounding FM 3-24—is its surprisingly *conventional* approach to *un*conventional war. In particular, it reverts to much the same solution Soldiers typically fall back upon when confounded by a difficult operational situation, COIN or

otherwise: employ ever larger numbers of Soldiers and have them engage in "close" contact with the "target," however defined.

At its core, FM 3-24 enthusiastically reflects the Army's hallowed concept of "boots-on-the-ground."[62] It is an approach sure to delight those[63] (albeit not necessarily the manual's authors) who conceive of solutions to all military problems mainly in terms of overwhelming numbers of ground forces. And the numbers of "boots" FM 3-24 demands are truly significant. It calls for a "minimum troop density" of 20 counterinsurgents per 1,000 residents.[64] This ratio (which may be based on "questionable assumptions"[65]) has enormous implications for the US's COIN effort in Iraq. For Baghdad alone, the ratio would require over 120,000 troops;[66] for all of Iraq more than 500,000.[67]

FM 3-24 seems to conceive of accumulating combat power not through the massing of *fires*, as would normally be the case, but by massing COIN *troops*. Both Airmen and Soldiers recognize the importance of mass[68] as a principle applicable to COIN as with any other form of warfare. To an Airman, however, mass is *not* defined "based solely on the quantity of forces" but rather in relation to the *effect* achieved.[69] Although doctrinally the Army recognizes the concept of effects,[70] FM 3-24 seems to see the means of achieving them primarily through deploying ground forces.

The manual's predilection for resorting to large force ratios of Soldiers to address the challenge of COIN caters to the Army's deeply-embedded philosophies. For example, the service begins *both* its *seminal* doctrinal documents, FM 1, *The Army*,[71] and FM 3-0, *Operations*,[72] with the same quote from T. R. Fehrenbach. It is from *This Kind of War,* his book about the Korean conflict, and it glorifies the boots-on-the-ground approach:

> You can fly over a land forever; you may bomb it, atomize it, pulverize it and wipe it clean of life but if you desire to defend it, protect it, and keep it for civilization you must do this on the ground, the way the Roman Legions did, by putting your young men into the mud.[73]

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The selection of the Fehrenbach quote to introduce documents so central to the Army suggests that the institution harbors something of an anti-airpower (if not anti-technology) bent. That the Army still clings to a vision of airpower from a conflict nearly 60 years past says much about the mindset and culture being thrust upon today's Soldiers.

Airmen must, nonetheless, understand and respect that the Army is rightly the proud heir to a long tradition whose ideal might be reduced in "heroic" terms to a close combat contest of champions on the order of Achilles and Hector.[74] The centerpiece of such struggles often is not the weapons the warriors brandish, but the élan with which they wield them.

The Army still views the infantry as the "Queen of Battle"[75] and considers the infantryman the quintessential Soldier whose mission is "to close with the enemy" and engage in "close combat."[76] Moreover, Gen David Petraeus, the principle architect of FM 3-24, romanticized the ideal of close combat when he recently remarked that there "is something very special about membership in the 'brotherhood of the close fight.'"[77]

Without question there are—and will always be—many situations (in COIN operations as well as in others) where it is prudent and *necessary* for ground forces to close with the enemy. The problem is that FM 3-24 discourages combating insurgents in almost any other way.[78]

Like most COIN writings, the manual promotes as a main objective the people themselves[79] and aims to win their "hearts and minds."[80] To accomplish that, the doctrine contemplates COIN forces physically "closing" with the target population through various engagement strategies. Unfortunately, this is a methodology frequently unsuitable for *US* forces in twenty-first century environments, including today's Iraq (as will be discussed below).

In other words, the same affinity for close contact in *combat* situations is applied, in virtually an undifferentiated way, to contacts in *non-kinetic* or *noncombat* "winning-hearts-and-minds" settings. Again, it is certainly true

that COIN forces will (and even *must*) interface with the target population if an insurgency is to be defeated, but the specific circumstances of when, where, how, and—most importantly—*who* are all factors that need to be carefully evaluated before doing so.

Regrettably, FM 3-24 gives too little consideration to the possibility that hearts and minds might sometimes be more efficiently and effectively "won" without putting thousands of foreign counterinsurgents in direct contact with the host-nation population. Furthermore, it does not seem to realize that even attempting to use *American* troops in that role is not just ineffective but actually counterproductive in many COIN scenarios.[81] Consequently, inadequate delineation between COIN forces generally, and American forces specifically, is one of FM 3-24's most serious conceptual flaws.

In some instances, technology can obviate the need for massive numbers of boots-on-the-ground. Soldiers seem to be predisposed, as the Fehrenbach quote intimates, to be uncomfortable with *any* technology that might diminish or even displace the large ground formations so vital to their tradition-driven self-conceptualization. This kind of adherence to "tradition" is in stark contrast to an Airman's way of thinking.

COIN and an Airman's Way of Thinking

FM 3-24 is an exquisite illustration of the differing paths Airmen and Soldiers can take in addressing war-fighting matters. Considered more broadly, the contrasting philosophical perspectives underlay the fact that airpower is "inherently a strategic force."[82] Thus, Airmen *tend* to reason in *strategic* terms.

Soldiers, however, are intellectually disposed to favor close combat and *tend* to think *tactically*. These tendencies are certainly not exclusive

focuses of either component—many Soldiers are extraordinary strategic theorists, and many Airmen have enormous tactical expertise. Rather, they are cultural propensities that, when recognized, are helpful in analyzing FM 3-24's manpower-intensive approach.

The Strategic Inclination

The strategic inclination of Airmen as applied to counterinsurgency requires some explanation. In FM 3-24, there is no broad recognition of the need for anchoring all aspects of modern COIN operations in strategic considerations.[83] Yet effective doctrine for American COIN forces today must account for US strategic political goals.

With respect to Iraq, this means a "unified democratic Iraq that can govern itself, defend itself, and sustain itself, and is an ally in the War on Terror."[84] Thus for Airmen, the manual's statement that "long term success in COIN depends on the people taking charge of their own affairs and consenting to the government's rule" is not quite right. If the government that emerges in Iraq is one that is intolerantly majoritarian, divided into sectarian fiefdoms, supportive of terrorism, or otherwise hostile to US interests, the COIN effort will have failed.

Strategic thinking also means understanding "politics" in the Clausewitzean sense; that is, the relationship of the "remarkable trinity" of the people, the government, and the military.[85] When COIN operations become disconnected from political goals and political realities, even technical *military* "success" can become strategic defeat.[86]

Furthermore, for Airmen strategic thinking encompasses the aim of achieving victory without first defeating the enemy's fielded military capability.[87] Put a different way (that may be specially apt for COIN operations conducted by American troops), it means defeating the enemy's military capability without excessive reliance upon the close fight; especially since the close fight is so costly in human terms and can generate intractable political issues for US decision-makers.

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Strategic, *airminded* thinking can also produce means of pacifying the host-nation population that avoid the potential difficulties arising from excessive interaction by American troops with a population likely to resent them as occupiers. Airpower may supply such solutions.

Officially, the definition of strategic air warfare[88] speaks about the "progressive destruction and disintegration of the enemy's war-making capacity to a point where the enemy no longer retains the ability or the will[89] to wage war." In COIN, destroying an enemy's war-making capacity is a complex, multi-layered task, but the point is that an Airmen's perspective[90] on doing so would not necessarily require the tactical, close engagement by ground forces that FM 3-24 favors.

Not only do Airmen naturally look for opportunities to destroy the enemy from afar, they also instinctively look for ways to *affirmatively* frustrate the adversary's opportunity for the close fight. In insurgencies, the close fight FM 3-24 supports usually optimizes the insurgent's odds because the ground dimension is typically the only one in which he can fight with a rational hope for success. Airmen favor denying the enemy the chance to fight in the way he prefers.

Airmen seek "engagement dominance"[91] that denies an adversary the opportunity to bring his weapons to bear. As a matter of doctrine, therefore, Airmen first seek to achieve air superiority so that airpower's many capabilities can be employed with impunity.[92] Generally speaking, American airpower achieves such dominance in COIN situations. Because insurgents are often (albeit not always) helpless against US airpower—and especially fixed-wing airpower—it represents a unique and powerful kind of "asymmetric" warfare[93] that *favors* the United States, an advantage an effective COIN doctrine must exploit.

US airpower allows Airmen to control their domains to a far greater degree than Soldiers have been able to achieve on the ground (particularly in Iraq). Much of the reason for the US's worldwide superiority in

airpower is top-quality equipment. Unsurprisingly, therefore, Airmen are inclined towards high-technology and solutions that generate asymmetric military advantages.

The Technological Inclination

One of the most pervasive, if inexplicable, staples of COIN literature (including FM 3-24) is an attitude towards technology that ranges from overlooked to misunderstood to outright antagonistic. Much of this antipathy is aimed directly at airpower. Typical of the antagonistic is Air War College Professor Jeffrey Record's 2006 essay that ridicules what he describes as the "American Way of War" as "obsessed" with a technology "mania" which is "counterproductive" in COIN.[94] Ironically, Dr. Record explicitly cites the air weapon as the "most notable" cause of the counter-productivity:

> The US military's aversion to counterinsurgency … is a function of 60 years of preoccupation with high-technology conventional warfare against other states and accelerated substitution of machines for combat manpower, most notably aerial standoff precision firepower for large ground forces.[95]

Even more scathing is James S. Corum's new book, *Fighting the War on Terror: A Counterinsurgency Strategy*.[96] Interestingly, his previous book, *Airpower in Small Wars*, sought to consign airpower (which he considers exclusively in an aircraft context[97]) to a limited *supporting* role in COIN campaigns.[98] Although debatable, that view is at least comprehensible given the state of aviation technology during the time periods of the campaigns he examined.

Corum's current book is puzzling, however, as he appears to use it as an opportunity to demean technology generally and the US Air Force

specifically.[99] However valid that perspective may have been based on historical studies, it does not fully appreciate the potential of *today's* airpower in COIN strategies.

Airmen and the Uses of History

An Airman's fascination with innovation, especially cutting-edge technological innovation, is just one of the reasons Airmen and Soldiers interpret the past and what it might teach differently. FM 3-24's overarching intellectual touchstones are history and the Army's lessons-learned culture-and the doctrine is an outstanding example of both. In fact, its historical focus is itself one of the paradoxes of the document. While this emphasis gives great strength, it is also likely one of the reasons FM 3-24 does not fully exploit airpower and other cutting-edge technological solutions.

Instead, FM 3-24 enthusiasts gush that it "draws on lessons from history [and cites] Napoleon's Peninsular Campaign, T. E. Lawrence in Arabia,[100] Che Guevara and the Irish Republican Army, as well as recent experiences in Afghanistan and Iraq."[101] Therein, however, lies the problem: *none* of FM 3-24's case studies involve the very latest airpower technology.

The air weapon is constantly evolving with a velocity that is difficult for surface warriors, with their tradition-imbued deference to the past, to grasp fully. Even though it draws upon Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF) experiences, the manual still does not explore airpower's *current* potential. The limits of airpower during FM 3-24's drafting[102] (publication date of December 2006) may already have been superseded by recent advances (some of which are discussed herein[103])—that is how quickly technological change can affect the air weapon.

If utilizing all the capabilities of the joint team is important, lessons of *past* COIN operations conducted in the context of now-obsolete aviation technology should not be indiscriminately applied in assessing the value of

airpower in *future* COIN operations. As the new joint doctrine is drafted, this limitation on the uses of history must be fully understood.

The swiftness of technological change has, for Airmen, real and immediate consequences in combat.[104] The history of airpower is littered with examples of the rapid fall from grace of aircraft that once dominated the skies only to be overtaken—sometimes in mere months—by platforms with better capabilities.[105]

Airmen are also confronted with the hard truth that much of today's airpower capabilities are linked to computer power. For that reason , they are keenly aware of the Moore's Law[106] phenomena that produces rapid obsolescence of weaponry which relies upon the microchip.[107] Naturally, this makes Airmen especially disposed to seek relentlessly the most advanced systems available. This is why the Air Force, with warplanes older on average than 25 years, is so focused on modernization and recapitalization.[108] "Historical" aircraft and other older technologies have sentimental but not operational value to Airmen.

Technologically inferior infantry weapons can maintain their relevance far longer than is the case with air weaponry. Other factors (*e.g.,* organization, training, and spirit) may offset technological deficiencies. For example, the AK-47 assault rifle remains an effective weapon despite expert opinion that the M-16 supersedes it.[109]

This is not the case with aerial combat. Even the most skilled and motivated aviator cannot overcome the physics of flight as governed by the aircraft's design. Though technology does eventually transform land warfare, the *pace* of change is not nearly as rapid as it is with most aviation systems.

It is, of course, true that there are important examples of insurgents who prevailed against higher-technology surface opponents. Such instances are, however, properly interpreted as the insurgents winning *in spite of* technological inferiority, *not because of it* as some contemporary COIN

enthusiasts seem to think. In an opinion piece in the *Wall Street Journal*, Bing West and Eliot Cohen made the apt observation that "the American failure [thus far] in Iraq reflects not our preference for high technology—as facile critics claim—but our inability to bring appropriate technology to bear."[110]

To the frustration of Airmen,[111] much ink has been spilled over the notion that high-tech airpower "failed" during the 2006 Israeli operations in Lebanon against Hezbollah.[112] The supposed lesson-learned, it seems, is that only landpower "works" in low-intensity conflicts (to include COIN).

What is ironic about these assessments is that today Israel's border with Lebanon is secured by a force that is internationally manned and funded—and which has largely ended Hezbollah rocket attacks. Not a bad strategic result.[113] In fact, many analysts are becoming convinced, as Professor Edward Luttwak is, that the "the war is likely to be viewed in the long term as more satisfactory than many now seem to believe."[114] Moreover, if airpower is to be denigrated because it allegedly failed to achieve "decisive" results in a 34-day war, what should one make of the performance of groundpower in more than 1,500 days in Iraq—that groundpower fails as a COIN force?

Even such an articulate and helpful analysis of the war as that of Susan Krebs (which appears in the Spring 2007 issue of *Parameters*[115]) suffers from an unwarranted transference of generic assessments of airpower to that of *American* airpower. Although Krebs recognizes that "no two wars are the same," she nevertheless belittles airpower's low-casualty success in the "Gulf War and Kosovo" by saying that those conflicts "may have been the anomalies."

At the same time, her analysis of Israeli airpower in the Lebanon war leads Krebs to propound as a "given" the proposition that the "effects of airpower against asymmetric adversaries" are "limited." Underpinning that conclusion is the mistaken assumption that the capabilities and doctrine (and, perhaps, *creativity*) of *American* airpower and Airmen *today* is

conterminous with that of the Israeli Air Force at the time of the operations against Hezbollah. Unfortunately, this kind of lessons-learned thinking unproductively "fossilizes"[116] judgments about the current utility of US airpower to the COIN fighter.

To be sure, Airmen respect and study history, but they are keenly aware of its limits, especially as to the airpower lessons it suggests. They see history, as does scholar Eliot Cohen, as a "foundational component of education for judgment."[117] Importantly, Dr. Cohen insists that he does not want his students to "learn the lessons of history" as they "do not exist" but rather to "think historically." Airmen would agree.

Airmen would also agree with General Petraeus,[118] who said (albeit more than 20 years ago) that while history has "much to teach us" it "must be used with discretion" and not "pushed too far."[119] This is especially so with respect to strategizing COIN doctrine for Iraq. One former Soldier maintains that since the conflict there "has mutated into something more than just an insurgency or civil war … it will take much more than cherry-picking counterinsurgency's 'best practices' to win."[120]

Clearly, the unwise use of history risks, as one pundit put it, attempting to "wage war through the rearview mirror."[121] Misunderstanding history can perpetuate myths about the air weapon that hurt America's COIN fight.

FM 3-24's Airpower Myths

Institutional infatuation with the individual soldier, an affinity for the close fight, skepticism toward new technology, and over-reliance on historical case studies add up to FM 3-24's troop-centric and technology "light"—if not outright anti-airpower—theme. Airmen may find, however, that the most pernicious—and flawed—aspect of FM 3-24 is its treatment of the *strike* capability of airpower. Specifically, it admonishes ground commanders to

exercise exceptional care when using airpower in the strike role. Bombing, even with the most precise weapons, can cause unintended civilian casualties. Effective leaders weigh the benefits of every air strike against its risks. An air strike can cause collateral damage that turns people against the host-nation (HN) government and provides insurgents with a major propaganda victory. Even when justified under the law of war, bombings that result in civilian casualties can bring media coverage that works to the insurgents' benefit.[122]

While it is certainly true that air attacks can—and do—cause civilian casualties,[123] it is not clear why FM 3-24 singles-out airpower from other kinds of fires, except to say it represents an astonishingly "fossilized"[124] take on current and emerging airpower capabilities. The manual looks to be excessively influenced by historical myths about airpower and its association with civilian casualties. These myths persist despite determined efforts by Airmen to correct the record.[125]

While it may be excusable for ground-component officers to be unfamiliar with all the esoterica of the latest in airpower capabilities, it is still rather surprising that relatively open information about airpower's ability to apply force precisely is not reflected in FM 3-24. Consider this 2003 report from *Time Magazine* about the early phases of OIF:

> Judging from the look of the [OIF] battlefields today, the bombing was largely surgical. In the open market in Mahmudiyah, five tanks were hit from the air while they were parked in alleyways so narrow that their gun turrets could not be turned. The storefront windows a few feet away were blown out, but otherwise the surrounding buildings are intact.[126]

Though it is fashionable in many quarters to dismiss the once-popular concept of the Revolution in Military Affairs,[127] it is nevertheless beyond

debate that information technologies stimulated the "Precision Revolution"[128] that vastly improved the accuracy of air weaponry. Most US attack aircraft now employ sophisticated targeting systems that markedly reduce the risk of civilian casualties. For example, the Litening targeting pod[129] contains a high-resolution, forward-looking infrared sensor and a charged coupled device camera that permit exceptional strike accuracy.[130] Likewise, the Sniper Advanced Targeting pod is a multi-spectral system that produces high-resolution imagery that "allows aircrews to detect and identify tactical-size targets outside … jet noise ranges for urban counter-insurgency operations."[131]

Using a whole family of satellite-guided munitions,[132] US aircraft can strike targets with remarkable accuracy in any weather.[133] Furthermore, upgrades to the Air Force's E-8 Joint STARS[134] aircraft can enable satellite-guided munitions to strike *moving* targets.[135]

Besides advanced targeting systems and precision technology, the employment of smaller air-delivered munitions is a further reason why airpower is now able to minimize collateral damage. Smaller munitions have long allowed AC-130 gunships to provide "surgical firepower"[136] with their cannons. More recently, the MQ-1 Predator unmanned aerial vehicle (UAV) was armed with the Hellfire II missile which has a warhead of only 20 pounds.[137] Of even more significance is the deployment in late 2006 of GBU-39B, the Small Diameter Bomb (SDB).[138] This is a munition optimized for the COIN mission. As Lt Gen Gary L. North[139] explains:

> The SDB is uniquely qualified for urban targets that call for precision accuracy and reduced collateral damage and in close-air-support missions that our aircrews find themselves in during Operation Iraqi Freedom and Operation Enduring Freedom. . . . We now have the ability to put ordnance in places where collateral damage might be a concern.[140]

The air component is committed to this new capability: the Air Force is planning on buying 24,000 SDBs, some of which will have a composite casing in lieu of steel as an effort to reduce collateral damage even more.[141] Furthermore, the Focused Lethality Munition "will combine a SDB casing with a new explosive fill that will confine the weapon's blast effects to within 100 ft. of its detonation point."[142]

Beyond the targeting and munitions technology, the *processes* by which airpower is employed are proving to be as, or more, effective in minimizing collateral damage as those used for land-component fires. For OEF, the air component developed and deployed to air and space operations centers (AOCs)[143] sophisticated methodologies and processes, supported by specialized computer systems, which helped minimize collateral damage by allowing detailed targeting and weaponeering analysis.[144] AOC capabilities are being updated constantly, with the potential to eventually have the ability to "place the cursor over the object of interest on the control screen and have the center's systems automatically generate all the options for planners and executors."[145]

Some of the most important elements of the process, especially for emerging and time-sensitive targets, are outside of the AOC. Among these are the ground-based Joint Terminal Attack Controllers (JTACs) that are part of the Air Force's Battlefield Airmen program.[146] JTACs serve with the ground component and ensure that the "aircrew identifies and attacks the correct target, minimizing the risk to friendly ground forces and preventing unwanted collateral damage."[147] Remarkably, JTACs equipped with laptop-based Remotely Operated Video Enhanced Receivers (ROVER) systems can "exchange live video imagery with pilots in the cockpit."[148]

Such procedural innovations, as well as the technology to support them, give savvy commanders confidence in using airpower. For example, ROVER systems are one reason "close air support missions flown by US Air Force pilots [in Afghanistan] increased nearly 80 percent in the first five weeks of 2007."[149] With proper coordination and the right technology,

the average response time to troops-in-contact requests for airpower from ground commanders has fallen to "six to seven minutes" or less.[150] All of these efforts produced tangible results that demonstrate that airpower operations minimize the risk to civilians *more* than do ground operations. Human Rights Watch's study of the major combat operations portion of OIF was harsher on ground forces than it was on the air component. Specifically, the report stated that "Human Rights Watch's month-long investigation in Iraq found that, in most cases, *aerial bombardment resulted in minimal adverse effects to the civilian population* (emphasis added)."[151] Their assessment of ground force performance was not nearly as positive:

> U.S. and U.K. ground forces were found to have caused significant numbers of civilian casualties with the widespread use of cluster munitions, particularly in populated areas. Moreover, in some instances of direct combat, problems with training on as well as dissemination and clarity of the U.S. ground forces' rules of engagement may have, in some instances, contributed to loss of civilian life.

Nevertheless, myths about airpower's alleged responsibility for civilian casualties *vis-à-vis* landpower persist. In a fascinating March 2007 column, "Shock and Awe Worked, God Help Us," former Army officer turned national security commentator Bill Arkin concludes that the disparate treatment may be the result of the way today's media reports.[152]

Arkin believes that during OIF ground forces actually "caused far more civilian harm [than airpower] with each inch of territory it took."[153] However, when harm occurred, there was an embedded reporter writing about it "from behind U.S. lines from a U.S. perspective," who got the explanation for the incident from a "sympathetic observer, a comrade in arms."[154]

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By contrast, there were "no embeds in the cockpit, none even on most air bases."[155] By default, therefore, the story was "death and destruction" as told from an *Iraqi* perspective.[156] This built a "heartless" and inaccurate "image of airpower stuck in World War II mass destruction and Vietnam carpet bombing."[157] In other words, the "history" of an airpower civilian-casualty incident was often reported and recorded quite differently than those caused by landpower.

As to FM 3-24's concern about bombing and media coverage, the data show that the impact of civilian casualties on the attitudes of foreign populations is not as well understood as the document suggests. In a RAND study released in 2007, researchers found that the "public opinion data on foreign attitudes toward… specific instances of civilian casualties" were difficult to obtain resulting in assessments that were more "sketchy and impressionistic" than those related to US public opinion.[158]

Furthermore, appreciation for efforts to avoid unintended civilian casualties can vary across cultures. This is particularly true in Arab societies like Iraq. RAND found that Arabs were opposed to OIF in principle and therefore were inclined to judge any civilian casualties harshly.[159] Likewise, as early as 2003 Fouad Ajami reported,

> The Arabs are clearly watching, and seeing, a wholly different war. No credit is given for the lengths to which the architects of this campaign have gone to make the blows against the Iraqi regime as precise as possible, to spare the country's civilians, oil wealth, and infra-structure.[160]

Ajami goes on to indicate that because of the influence of the mainly hostile Arab media, Arabs cannot be convinced that "Western commanders are no rampaging 'crusaders' bent on dispossessing Iraqis of their oil wealth."[161] Consequently, although FM 3-24 commendably seeks

to avoid insurgent exploitation of unintended civilian casualties, there is little evidence that such efforts create much in the way of positive feelings among the host-nation population, at least in the Middle East.

In any event, in assessing the impact of civilian casualties on COIN operations, it is also vitally important to distinguish between the impact of foreseeable yet *unintended* civilian casualties (as is typically the case with aerial fires) and those resulting from what appears to be *deliberate* killings (which do occur with ground forces but almost never as a result of airpower). While it is not clear what impact civilian deaths resulting from unintentional actions may have, those that seem to result from the deliberate actions of ground forces plainly create *negative* opinions.

Professor Mackubin Owens of the Naval War College maintains that while all insurgents seek to propagandize civilian deaths—even unintentional ones—it is "even better for the insurgents' cause if they can credibly charge the forces of the counterinsurgency with the targeted killing of noncombatants."[162] Thus, the allegations of deliberate killings by US ground troops at Haditha, Hammadyia,[163] Mahmudiyah,[164] and elsewhere have been far more damaging to the COIN effort than *any* air-delivered weaponry that has gone awry.

Indeed, the most devastating setback the COIN operation in Iraq has suffered was "collateral damage" *intentionally* inflicted by ground troops such as occurred with Abu Ghraib and related prisoner abuse scandals. Lt Gen Ricardo Sanchez, the Army general in command at the time, correctly labeled Abu Ghraib in traditional military terms as "clearly a defeat."[165] Predictably, Abu Ghraib has had many ramifications, not the least of which was that the intelligence-gathering process suffered greatly.[166]

This kind of deliberately inflicted "collateral damage"—which can *only* occur where there are boots-on-the-ground—is particularly damaging to the COIN effort in Iraq because it is so antithetical to the mores and values of Arabs. Dinesh D'Sousa explains that to some Arabs, this is worse than death:

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The main focus of Islamic disgust [about Abu Ghraib] was what Muslims perceived as extreme sexual perversion. . . . Moreover, many Muslims viewed the degradation of Abu Ghraib as a metaphor for how little Americans care for other people's sacred values, and for the kind of humiliation that America seeks to impose on the Muslim world. Some Muslims argued that such degradation was worse than execution because death only strips a man of his life, not of his honor.[167]

To its great credit, FM 3-24 devotes an entire chapter to leadership and ethics,[168] and contains several additional pieces of guidance all designed to avoid such incidents.[169] Nevertheless, it is questionable whether it is possible to stop them entirely so long as there are troops on the ground. As Stephen Ambrose observes in his classic *Americans at War*:

When you put young people, eighteen, nineteen, or twenty years old, in a foreign country with weapons in their hands, sometimes terrible things happen that you wish had never happened. This is a reality that stretches across time and continents. It is a universal aspect of war, from the time of the ancient Greeks up to the present.[170]

As difficult as it is to avoid such incidents in conventional war, it is even more challenging in counterinsurgency. As Ambrose points out, most casualties in modern war come from "booby traps or snipers [or] landmines," and this can enrage soldiers leaving them "very often seeking revenge."[171] This is exactly the problem in Iraq where improvised explosive devices (IEDs) are the most deadly weapon COIN forces face.[172] According to former Army officer Dan Smith, IEDs catalyze the worst kind of collateral damage: war crimes. He observes in the *Christian Science Monitor*:

There is pure frustration, pure anger, pure rage because there is no one who is the obvious perpetrator. . . . Soldiers

soon decide they can trust no one except their comrades . . . and quickly the indigenous people—all of them—become inferiors. Being inferior, they are less than human and deserve less respect, at which point one has entered the slippery slope that can end with a war crime.[173]

General Petraeus[174] acknowledges this is a real issue in today's COIN fight. "Seeing a fellow trooper killed by a barbaric enemy can spark frustration, anger, and a desire for immediate revenge."[175] Petraeus was reacting to a startling report about ground force attitudes in Iraq. In a May 2007 interview, Assistant Secretary of Defense for Health Affairs S. Ward Casscells revealed the findings of a survey of Army and Marine forces:

> Only 47 percent of the soldiers and 38 percent of Marines agreed that non-combatants should be treated with dignity and respect. Well over a third of all soldiers and Marines reported that torture should be allowed to save the life of a fellow soldier or Marine. And less than half of soldiers or Marines would report a team member for unethical behavior.[176]

Sometimes the frustrations of a COIN conflict can even infect the thinking of leaders. In a report about the allegations of misconduct by Marines at Haditha, the *Washington Post* reports that the investigating Army general concluded that "all levels of command" tended to believe that civilian casualties were a "natural and intended result of insurgent tactics."[177] This "fostered a climate that devalued the life of innocent Iraqis to the point that their deaths were considered an insignificant part of the war."[178]

Can better training and improved leadership prevent such incidents that in an era of instantaneous, 24-hour news are so damaging to COIN operations? Only to a degree. In a new book about military justice in Vietnam, Professor William Thomas Allison points out the limitations of even the most robust mitigating efforts:

> The extreme nature of warfare, with its inherent fear and chaos, will contribute to acts of inhuman violence against combatants and noncombatants alike. Intensive training and, perhaps more so, leadership can minimize *though not wholly prevent such acts from occurring amid the savagery of combat* (emphasis added).[179]

Here is a recent example from Afghanistan: After escaping an ambush, an *elite* Marine special operations platoon continued to fire at Afghan civilians for the next 10 miles. In the process, this presumably highly-trained ground force killed "at least 10 people and wound[ed] 33, among them children and elderly villagers."[180] According to Maj Gen Frank H. Kearney III, head of Special Operations Command Central, his investigators believe the civilians killed "were innocent."[181] General Kearny adds that this ground-force incident "had a catastrophic outcome from a perceptions point of view."[182]

FM 3-24 is rightly concerned about collateral damage; the problem is that it ascribes the greatest risk to exactly the wrong source. If avoiding the most damaging kind of "collateral damage" is as important as FM 3-24 claims, *then reducing the size of and reliance on the ground component is the way to do it,* not *by limiting airpower.*

Airpower offers casualty-minimizing advantages over landpower beyond precision weapons and other technologies. The air weapon is largely under the control of highly-disciplined,[183] officer-pilots operating in relative safety above the fray. Decisions as to the application of force can be made without the chaos and enormous pressure a young COIN trooper faces under direct attack. While mistakes can still occur, as when aviators (or ground controllers) misidentify friendly forces as enemy, such incidents, however tragic, do not have the adverse effect on host-nation populations that FM 3-24 is concerned about.

By expressing cautions about the use of airpower that are not imposed on ground-force fires, FM 3-24 violates the rules of construction of good

doctrine by inappropriately focusing on platforms as opposed to *effects*.[184] With effects as the focus, analysis reveals that the manual's reliance upon boots-on-the-ground actually *increases* the risk of incurring the exact type of civilian casualties most likely to create the adverse operational impact wrongly attributed to airpower.

FM 3-24's treatment of airpower is yet another indication of an endemic issue; that is, a misunderstanding of today's airpower technology and its ability to be applied in a way that minimizes the risks of the most damaging kind of collateral damage. This is a problem that plagued Airmen during OEF. In his book, *Airpower Against Terror: America's Conduct of Operation Enduring Freedom*, RAND analyst Benjamin Lambeth found:

> Senior leaders, both military and civilian, did not fully understand the accuracy and reliability of munitions, their destructive effects, and their ability to mitigate collateral damage when used properly. That led to fears of collateral damage on their part that were groundless.[185]

Unfortunately, FM 3-24 continues this "groundless" view of current—not to mention emerging—airpower capabilities. A more airminded doctrine would correct this deficiency as well as offer fresh considerations for a truly joint COIN approach.

Considerations for Airminded
COIN Doctrine[186]

What would joint counterinsurgency doctrine that includes airminded-ness[187] look like? It is well beyond the scope of this paper to provide a full-blown draft doctrine. Nevertheless, it is possible to identify some

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considerations, in addition to those already mentioned, that an Airman might bring to the development of joint COIN doctrine.

To reiterate, "airminded" does not mean "air-centric" or even dominated by airpower. At a minimum, however, it does mean applying airmindedness to the problem of insurgency. Doing so provides many opportunities to create what COIN experts Steven Metz and Raymond Millen say is needed to win: an "effects-based approach designed to fracture, delegitimize, delink, demoralize, and deresource insurgents."[188] What follows are a few examples of how an Airman might approach some of the challenges of COIN.

Assess the Strategic Situation of American COIN Forces

Strategic analysis is absolutely essential to success in twenty-first century COIN operations. Tactical and even operational excellence that does not account for the larger, strategic view dooms the counterinsurgency effort to failure. An accumulation of tactical and operational ideas, however valuable as savvy quick-fixes, must not be allowed to masquerade as a strategic analysis. As Col Joseph Celeski, USA, notes, "True strategic thinking on the subject of COIN and irregular warfare should consider time and space and the long strategic view."[189]

Of particular concern is the absence in FM 3-24 of almost any discussion of the importance of a strategic analysis of US forces in COIN situations. Though FM 3-24 rightly counsels sophisticated assessment of *insurgent* forces (to include the myriad of influences upon them) and discusses much about host-nation COIN forces, it almost never implies a similar examination of American COIN troops. What is indispensable is a study of the "correlation of forces,"[190] so to speak, that arises when US troops are employed as COIN forces in specific situations.

In the case of Iraq, this means analyzing COIN operations being conducted by American troops in the context of what the Iraqis consider an occupation following an invasion.[191] This is what COIN expert

David Kilcullen calls a "resistance warfare" scenario.[192] Such situations complicate the job for US forces tasked with winning hearts and minds. As President Bush himself recognizes: "Nobody wants to be occupied. We wouldn't want to be occupied."[193]

Though OIF was intended as a liberation operation, it has come to be viewed as an occupation following a military defeat. As such, it is particularly distressing in an Arab culture where the psychology of shame and humiliation is powerful.[194] That it came at the hands of what many Muslims see as the "Crusader" West is mortifying. It seems to confirm what Middle East expert Bernard Lewis asserts in *What Went Wrong*,[195] that is, that in the twentieth century it became "abundantly clear," when compared to its "rival" Christendom, the "world of Islam had become poor, weak, and ignorant."[196]

In explaining this situation, Lewis says that Arabs eventually settled upon a "plausible scapegoat—Western imperialism."[197] In Iraq, such ideas have manifested themselves in virulent opposition to the US presence by powerful religious leaders. Edward Luttwak reports that both Shiite and Sunni clerics "have been repeating over and over again that the Americans and their 'Christian' allies have come to Iraq to destroy Islam in its cultural heartland and to steal the country's oil."[198]

The confluence of all these circumstances may explain why, for American COIN forces in Iraq, FM 3-24's approach is so difficult to implement. Yossef Bodansky, a noted terrorism expert, argues,

> The Iraqi populace, the most socially progressive society in the Arab world, is willingly embracing traditionalist radical Islam as the sole power capable of shielding them against American encroachment, as well as facilitating the humiliation, defeat and eviction of the hated Americans from their land and lives.[199]

Similarly, Diana West ruefully concludes that anyone with "an elemental understanding of institutional Islamic antipathies toward non-Muslims and non-Muslim culture" would reject a strategy that depends upon US forces winning the "trust and allegiance" of Iraqis.[200] West rhetorically queries, "Could it be that [Iraqis] only offer allegiance to fellow-Muslims?"[201]

All of these factors combine to create attitudes hostile to FM 3-24's hearts-and-minds approach. Consider the findings of a BBC poll from early 2007:

> Among all Iraqis, support for the coalition forces is low: 82 percent expressed a lack of confidence in them (a little higher than 2005), 78 percent opposed their presence and 69 percent thought they had made the security situation worse. Just over half (51 percent) thought politically-motivated attacks on coalition forces were acceptable (17 percent in 2004).[202]

The last finding is especially problematic for a strategy that depends upon interspersing American COIN troops among the population. Still, none of this is to say counterinsurgency cannot work in Iraq; it is simply to illustrate the difficulties of accomplishing that task primarily via *American* boots-on-the-ground. In fact, polls show that 71 percent of Iraqis want our forces to leave within a year or sooner.[203] It is unlikely that FM 3-24's prescriptions of better cultural awareness, language training, and energetic interface with Iraqis will reverse these trends at this stage.

Apart from Iraq, *per se*, US forces in the twenty-first century operate in a unique international context. As the sole superpower in a world of globalized, omni-present media, every act by American forces has the potential to become an incident with debilitating strategic consequences. This concept, as enunciated by Gen Charles C. Krulak, former commandant of the Marine Corps, is recognized in passing by FM 3-24.[204] Krulak said in 1999 that:

> In many cases, the individual Marine will be the most
> conspicuous symbol of American foreign policy and will
> potentially influence not only the immediate tactical
> situation, but the operational and strategic levels as well.
> His actions, therefore, will directly impact the outcome of
> the larger operation; and he will become … the *Strategic
> Corporal*.[205]

While Krulak's words are as valid today as ever, there is an additional aspect in twenty-first century COIN operations. "Individual" US troops are also strategic *targets* for insurgents who aim to leverage their attacks on COIN forces for psychological value. Successful attacks against US soldiers can obtain legitimacy for insurgents and, indeed, even admiration among a population resentful of what it sees as an occupation. As discussed below, such attacks—and the casualties that result—erode the domestic support democracies need to wage war.

Even in classic counterinsurgency environments, the presence of foreign troops can be counterproductive. In evaluating the successful COIN operation against communist Huk insurgents in the 1950s (an effort largely designed by a US Air Force officer[206] but carried out *without* American forces), a Philippine officer concluded:

> Foreign troops are certain to be less welcome among the
> people than are the regular armed forces of their own
> government. Local populations will shelter their own
> people against operations of foreign troops, even though
> those they shelter may be outlaws…. It would be rare,
> indeed, if the use of foreign troops would not in itself doom
> to failure an anti-guerrilla campaign.[207]

Ironically, the mere presence of US forces in Iraq may operate to disincline insurgents from coming to a peace agreement because of their focus on expelling the foreign troops. A US Army officer who served in Iraq contends that "reducing the presence of US troops" is needed to

create "a possible incentive for the Shiite and Sunni desert traders to barter for coexistence—survival and preservation of their tribal social orders."[208]

In short, a strategic, airminded analysis of friendly forces would highlight the practical difficulties of a counterinsurgency doctrine that depends on the extended presence of significant numbers of American land forces. Senior leaders recognize this conundrum. In reference to Iraq, ADM William Fallon, the new Central Command commander, has stated that "time is running out" and, therefore, has abandoned the use of the "Long War" as inconsistent with his "goal of reducing the U.S. military presence in the Middle East."[209]

The COIN situation in Iraq is probably best described as a "prolonged war" which is, as Dr. Karl Magyar says, a kind of conflict that the protagonists thought would be short, but which becomes unexpectedly extended for a variety of reasons.[210] An Airman's strategic analysis would operate, therefore, to advocate a strategy less reliant on US troops, to look for alternatives to close combat/engagement by Americans, and to be more open to substituting technology for manpower. In short, a doctrine better configured for the demands of prolonged COIN efforts.

Adopt Strategy to Meet Demands of Prolonged COIN Operations

Notwithstanding Central Command's recent abandonment of the phrase, the United States must continue to fight "violent extremists" in what is still officially described as the Long War "currently centered in Iraq and Afghanistan."[211] If there is any principle about counterinsurgency with which there is little or no disagreement, it is that achieving success requires an extended effort.[212] Reconciling this fact with available and *realistically* obtainable military capability is one of the central dilemmas of US COIN efforts.

Because insurgencies take a long-term commitment to uproot,[213] FM 3-24's dependence upon masses of ground forces, especially American troops, simply is not a *sustainable* strategy—clearly not for Iraq[214] and

perhaps not for large-scale, twenty-first century COIN operations by US troops generally. Again, this is not to deny the many merits of FM 3-24— or its appropriate application in certain COIN settings—it is just recognition of the realities of contemporary exigencies. One analyst cogently put it this way:

> The model in FM 3-24 is constructed for the classical counterinsurgency of ten to twelve years in duration. It may work in certain circumstances in which we have a shorter duration with which to work, but it may not and is not designed to. Shorter COIN campaigns are outside the boundary conditions for the model.[215]

A strategy for today's Iraq ought to be built around realistically "attainable objectives"[216] as to its resource demands.[217] This, for all its wisdom, FM 3-24 does not do as applied to Iraq. Taken together, these comments suggest a proposition US strategists must address; that is, the phase of COIN operations that involves large numbers of US ground forces must be understood as time-sensitive and necessarily limited.

Why? As Gen Wesley Clark, USA, retired, has noted, "Historically, the Army [has] not had staying power abroad."[218] The reasons do not relate to the competence, courage, or devotion to duty of US ground forces, but rather, according to Clark, America's political sensitivity to soldier casualties in conflicts where national survival is not at risk.[219]

This raises a significant difficulty with assumptions underlying FM 3-24. Sarah Sewall, one of its major advocates, argues that US forces must "accept greater physical risks" for the doctrine to succeed."[220] But as one Army official put it in explaining the rise in casualties in Iraq since FM 3-24's implementation there, "Taking more risk contributes to the higher KIA [killed in action] rate."[221]

For insurgents, the center of gravity[222] of American COIN forces is not their combat capability. It is the *casualty-tolerance* of the US public that

must, in a democracy, ultimately support long-term troop deployment. An Army officer put it bluntly: "The enemy knows that the only real metric is US soldier and Marine deaths. The enemy knows that this manipulates our politics, media, and governance."[223]

Modern media practices personalize each death in ways unheard of in previous conflicts. Again, much of this is attributable to the relatively recent phenomenon of embedded reporters.[224] They "become one of the Band of Brothers" and this gives them the ability and motivation to "humanize" for the American public the troops with whom they are assigned.[225] Because of this, when troops die, the nation grieves in an intimate way as never before.

The embedded reporter phenomenon has enabled the creation of a plethora of well-informed books,[226] articles,[227] and broadcast media reports[228] that turn cold statistics about military casualties into sensitive stories of individuals, families, and tragic loss. These reports can generate controversy,[229] but the fact remains that the casualties are personalized to the body politic in a truly unprecedented manner.

Yet the strategic impact of casualties remains subject to debate. Some scholars argue that Americans will tolerate casualties if they believe that the war "was the right thing to do" and that there is a reasonable expectation of success.[230] Even if those are the right measures, does the American public still retain a "reasonable expectation of success" in Iraq? Not according to a March 2007 CNN poll which found that "less than half of Americans think the United States can win the war in Iraq."[231] Further, a May 2007 poll found that 78 percent of Americans think that things are going "badly" in Iraq.[232] One month later a poll revealed that 62 percent believe the United States "made a mistake sending troops to Iraq."[233]

In a report from early 2007, Gen Barry McCaffrey, USA, retired, concluded that "US domestic support for the war in Iraq has evaporated and will not return."[234] Paralleling this report is one relating to the views

of those currently in the armed forces. An Army Times poll indicates that the expectation of success has dropped dramatically among US troops, falling from 80 percent in 2004 to 50 percent in 2006.[235]

As executed in Iraq, FM 3-24's essential strategy (as described by Professor Sewall) inevitably puts US troops at greater risk.[236] For example, American forces have recently established and manned more than 50 small Joint Security Stations in Baghdad,[237] the idea being that the physical presence of COIN forces will increase the community's sense of security—as a necessary element to defeat the insurgency. Nevertheless, these isolated centers can be difficult to defend and have already come under attack.[238] As a Soldier noted, "These little combat outposts, they are more exposed: Your routes in here are very limited, and they're definitely watching us."[239]

This tactical dilemma could create an opportunity for insurgents to overrun one or more of the stations. Such an event could have very significant *strategic* impact, even if in purely military terms it is insignificant. No less a personage than Senator John McCain has expressed fears of attacks by Iraqi insurgents that could "switch American public opinion the way that the Tet offensive did" in Vietnam in 1968.[240]

The Tet offensive was conceived by North Vietnamese general Vo Nguyen Giap to stimulate a popular uprising, and involved scores of simultaneous attacks across the country. Although the attacks were repulsed with huge losses to the communist forces (the Viet Cong were nearly destroyed as a fighting force), the enemy nevertheless managed to achieve a psychological dislocation. The televised scenes of the unexpected attacks "shattered public morale and destroyed support for war in the United States."[241]

Apart from the strategic risks occasioned by FM 3-24's emphasis on masses of boots-on-the-ground, there is the practical problem of acquiring those boots. Importantly, the manual does not require just huge numbers of COIN forces; it demands highly-trained and exceptionally talented

individuals with more than expert war-fighting skills. Quoting COIN expert David Galula, FM 3-24 says the "soldier must be prepared to become … a social worker, a civil engineer, a school teacher, a nurse, a boy scout."[242]

Clearly, such counterinsurgents—American or Iraqi—do not exist in the numbers FM 3-24 demands. Can the United States produce more anytime soon? Not likely. As General McCaffrey has said, to meet *today's* manpower goals the Army has had to recruit many who hardly fit FM 3-24's paradigm for a COIN trooper:

> Generally speaking, we've quadrupled the number of lowest mental category. Generally speaking, we've quadrupled the number of non-high school graduates. Generally speaking, we're putting six [thousand], seven [thousand], 8,000 moral criminal waivers into the armed forces, drug use, etcetera. Generally speaking, when you tell me that you think that enlisting a 42-year-old grandmother is the right thing to do, you don't understand what we're doing.[243]

As to the latter effort, the program to enlist persons as old as age 42 has proven troubling,[244] and recently the Army failed to meet its recruiting target.[245] Overall, reports say "the Army is struggling to meet its [current] recruiting goals,"[246] in part because, as Brian Mockenhaupt explains in the June 2007 issue of *The Atlantic*, 7 of 10 people in the prime group are still ineligible for military service despite looser quality standards.[247] Even the Marine Corps sees challenges.[248] Ominously, other media reports say that Army junior officers, the institution's "seed corn," are departing the service in unprecedented numbers.[249]

Apparently, in an effort to maintain manning levels, the Army has been forced to make other compromises. Mockenhaupt reports:

When the Army softened the culture of basic training, it did so not to attract better recruits, but to get more bodies into the service and keep them there. At the same time, the Army is putting soldiers onto more-complex battlefields, where a single soldier's actions can hinder the war effort in far-reaching and long-lasting ways.[250]

Although the Army obviously has worked hard to recruit and retain[251] those who might have, or could easily acquire, the skills Galula describes,[252] it appears that the only near-term way to generate the quality and numbers of COIN forces (which FM 3-24 indicates an effort like that in Iraq needs) is to induct vast numbers of elites who are not currently serving.[253] Since the prospect of sizeable numbers volunteering is virtually nil, what FM 3-24, in effect, requires is a draft.

Few things are more controversial in American national security thinking than the wisdom of a draft. It is beyond the scope of this paper to discuss the many aspects of the issue, but suffice to say that DOD recently reiterated its opposition to conscription.[254] Regardless of DOD's position and the question of whether the American people would support a draft, one could reasonably conclude that people forced to don a uniform are not necessarily the right troops to deploy abroad to perform the complex tasks FM 3-24 assigns to COIN forces.[255]

All of this goes to a central difficulty with FM 3-24's construct for COIN operations involving US forces: *COIN operations rarely mobilize US national will because they almost never involve existential threats*. While Americans will serve and will tolerate enormous casualties in military operations if the goal is deemed worthy enough,[256] the problem with calling for the necessary sacrifice in COIN situations is that US interests—and not just in Iraq—are almost always *indirect*. Although succeeding in Iraq is extremely important, nothing an Iraqi insurgent does can jeopardize the very existence of the United States—as other security threats can.

Again, this is not unique to Iraq. Historically, COIN operations seldom, as Jeffrey Record observes, "engage core U.S. security interests."[257] The absence of an existential threat in COIN conflicts militates decisively against the political viability of employing a draft to obtain the size and quality of COIN forces FM 3-24 insists upon. It also presents real limits on support for COIN strategies involving the kind of risk that will inevitably increase US casualties.

In a recent *New York Times* essay author Rory Stewart put it bluntly, "American and European voters will not send the hundreds of thousands of troops the counterinsurgency textbooks recommend, and have no wish to support decades of fighting."[258] The question is the "staying power" of non-indigenous COIN forces.

Unlike landpower, airpower *does* have staying power much because it has relatively low cost and does not present the enemy with many opportunities to inflict casualties. It also does not necessarily require basing in the nation confronted by the insurgency. Staying power is illustrated by the fact that US Airmen have fought in the Middle East for over 16 years. That includes successfully enforcing the no-fly zone over Iraq for more than 11 years, an operation during which not a single aircraft was lost. Importantly, the small "footprint" effort did not generate much domestic or even foreign opposition.

This is not to suggest that greater exploitation of airpower in today's COIN environment in Iraq would be risk free, but merely to say that—relative to the massive ground forces adherence to FM 3-24 requires—its costs are more in line with the sacrifice Americans are willing to make. By using technology to reduce the need for manpower, airpower can minimize the enemy's opportunity to affect American will while inflicting a debilitating sense of helplessness on the enemy.

Exploit the Psychological Impact of American Airpower

As thorough a job as FM 3-24 does in reviewing previous conflicts involving nontraditional adversaries, it does not incorporate the implications of the *psychological* dimension of today's airpower. The following discussion is not about the much-debated impact of airpower on civilian morale, but rather how today's precision capabilities influence the morale of *combatants*. It is about targeting the *insurgents'* hearts and minds.[259] For example, understanding how airpower drove the Taliban and its Al-Qaeda allies from power in Afghanistan is essential to designing the effective use of the air weapon in future COIN operations.

Defeating the Taliban was a formidable challenge. Afghanis are among the world's most fearsome fighters and have enjoyed that reputation for thousands of years. The Soviets sought to tame them with an enormous application of raw combat power but ultimately failed. Yet, the United States was able to oust the Taliban and Al-Qaeda from power in a matter of weeks. How? By *inflicting helplessness* in a way that only the newest developments in airpower can accomplish.

Technology the Soviets did not possess and strategy they could not employ in the 1980s enabled US airpower to be decisive in Afghanistan two decades later. Russian aviators had neither the sensor suite nor the precision technology of today's US airpower. Typically, Soviet pilots were obliged to fly low enough to acquire their targets visually, which caused devastating aircraft losses once the mujahadeen acquired American-made Stinger antiaircraft missiles.[260] Although the Russians devised various tactics to counter that threat,[261] the missiles eventually forced them to the safety of higher altitudes that, in turn, caused accuracy and combat effectiveness to suffer.[262]

Unlike the Soviets in the 1980s, US airpower inflicted devastating, highly-accurate attacks not just by tactical aircraft but also by heavy bombers flying at altitudes that rendered what air defense the Taliban had completely ineffective. According to Gen Tommy Franks, the newly-

acquired linkage of ground-based controllers[263] to "B-52s orbiting high above the battlefield proved even more lethal than military theorists could have imagined."[264] Enemy forces in long-held positions often never saw or heard the plane that killed them. This new-style air onslaught rapidly collapsed enemy morale and resistance.

And it was accomplished with minimal risk to US personnel. One discouraged Afghani told the *New York Times* that "we pray to Allah that we have American soldiers to kill," but added gloomily, "these bombs from the sky we cannot fight."[265] It was not just the heavy bombers that the Taliban found so dispiriting; it was also the precision fire of AC-130 gunships—another weapon the Soviets did not possess. An Afghan ally related to General Franks that the gunship is "a famous airplane … [its] guns have destroyed the spirit of the Taliban and the Arabs."[266]

These capabilities capture one of the foremost features of contemporary American airpower in COIN situations: the ability to impose the psychology of "engagement dominance"[267] on otherwise dogged adversaries. It is not fear of death that extinguishes the will to fight in such opponents; it is the *hopelessness* that arises from the inevitability of death *from a source they cannot fight* that unhinges them.

Impotence in the face of superior weaponry and the denial of a meaningful death crush war-fighting instincts. Essentially, this is an exploitation of an inherent fear in soldiers of all cultures: to be confronted by technology against which they cannot fight. Even experienced soldiers can be driven to near-panic as happened when British soldiers faced German tanks during World War II with inadequate weaponry.[268]

The psychological effect of the infliction of helplessness by air attack may exceed the physical effects. Commenting on British use of airpower to suppress insurgencies in Arab territories during the 1920s and 1930s, Sir John Bagot Glubb concluded that although aircraft do not generally inflict heavy casualties, "their tremendous moral effect is largely due to the

demoralization engendered in the tribesman by his *feelings of helplessness and his inability to reply effectively to the attack* (emphasis added)."[269]

It might be said that American precision airpower creates something of an analogy (on a much larger and effective scale) to the effect that insurgents try to impose on US and other friendly forces through the use of IEDs. The seeming randomness, unpredictability, and persistence of these attacks are meant as much to destroy morale as to cause casualties. Although the Air Force does not use IEDs, its use of aerial weapons produces many of the same morale-destroying and stress-inducing effects. The difference is that the Air Force uses such weapons against legitimate military targets, and it can employ them in vastly greater numbers.

Properly employed,[270] the air weapon can impose "friction" and extreme psychological stress on insurgents. Airmen now[271] have a new weapon to carry out such devastating attacks, the MQ-9 Reaper UAV.[272] Four times heavier than the Predator UAV, and with a weapons load equivalent to that of the A-10,[273] the Reaper represents a new generation of "hunter-killer" aircraft that can relentlessly pursue insurgents at *zero risk* of a loss of an American.

None of this should suggest Airmen believe that COIN operations ought to be resolved exclusively through the use of force. What it does say is that there is still a place for its aggressive, offensive use as an important part of a holistic COIN doctrine, even in the highly-scrutinized operations of the twenty-first century. Nor does it mean that airpower is the only force to be used when force is required. As OEF demonstrates, airpower along with allied forces on the ground enhanced by tiny numbers of US Special Forces can produce results that minimize risk to Americans.

Clearly, however, not all airminded approaches to COIN involve kinetic attacks against insurgents. Airmen can also help devise non-kinetic approaches to aid the host-nation population caught in the violence.

Replace Clear-Hold-Build with Hold-Build-Populate

As one of its central means of assisting the host-nation population, FM 3-24 advocates a "clear-hold-build" strategy that requires COIN forces to "eliminate insurgent presence" in selected areas, followed by efforts to keep the location secure and to rebuild host-nation institutions.[274] In Iraq, this strategy is being executed with concentration on the "hold" portion.[275] While "hold" and "build" make obvious sense, the "clear" portion is proving difficult[276]—and worrisome as it inevitably puts US troops in confrontations with the Iraqi population, at least 51 percent of whom approve of attacks on American forces.[277]

Airmen, disposed to look for opportunities to deny insurgents the opportunity for the close fight, might offer an alternative, one that might be called "hold-build-populate." It would concentrate on the 49 percent of Iraqis who do not approve of attacking US troops by creating safe havens for them, especially for the middle class so essential for Iraq's survival. This approach would identify abandoned areas, rehabilitate them so they could be self-sustaining in essential services, secure them, and populate them as suggested below. (An alternative would be to address areas already populated *if invited by the residents*.)

The newly-opened Rule of Law Complex in Baghdad, a fortified "Green Zone" for legal infrastructure, proves this concept is doable. The complex is designed to "bring police, judicial/jail functions to a secure environment."[278] Importantly, the complex also provides residences and other living facilities for Iraqis providing these essential services. It is a self-contained haven that permits Iraqis to solve Iraqi problems without as much distraction as the ongoing chaos outside of the complex could otherwise impose.

Efforts to create some "gated communities" are already underway.[279] Whenever possible, these enclaves ought to include all religious groups so as to promote pluralism. It might also be possible to build them from the ground up—a process that would have the additional benefit of creating

jobs in an environment where unemployment is aiding the insurgency.[280] The ongoing construction of the massive US Embassy compound[281] is but one example that shows it is still possible to build "communities" in Iraq.

This proposal is not just a variation on FM 3-24's clear-hold-build strategy; it is actually a modest implementation of the "oil-spot strategy" Andrew Krepinevich championed in *Foreign Affairs*.[282] It also shares some of the attributes of the Hamlet Program from the Vietnam era.[283] There are, however, some differences.

Realistically, it may be wise to focus on developing smaller, self-contained areas like the prototype Rule of Law Complex aimed at specific governmental infrastructure that addresses such fundamental needs as schools, hospitals, water, power, and sewerage. Addressing the basic needs of the host-nation population can greatly facilitate COIN success.[284]

Obviously, such compounds need to be large enough to provide a meaningful economy of scale and to avoid the risks the small Joint Security Stations in Baghdad engender. Further, those wishing to reside in these areas would be vetted for security purposes. Regardless, modest-sized projects provide the opportunity for the "early success" that Galula says is so important to ultimate victory in counterinsurgency.[285] Besides, when security and development projects have gotten too large and too ambitious, they have foundered in past COIN efforts.[286]

The point is that under this approach the risk to American COIN forces is smaller relative to that required to clear an area as FM 3-24 describes. Of course, keeping these gated communities supplied is essential to holding them. Doing so will be challenging because of the dangers to land transport.

Consider Airminded Approaches to Supplying Fixed Locations

An airminded approach to the transportation problem would consider a number of options. One might be, paradoxically for a country with vast oil reserves, using wind[287] or solar power. Because electrical supplies are frequently disrupted and generators have significant fuel requirements, solar power especially could offer self-sustaining benefits. Airmen are already embracing this technology.[288]

An additional technique to offset insurgent tactics against logistical lines of communication would be to airlift vital materials so as to minimize the need for surface resupply. Those "oil spots" with airfields could be supplied by air-landed provisions. American airlift, General McCaffrey tells us, "flew 13,000 truckloads of material into Iraq for pinpoint distribution last year."[289] Moreover, pinpoint distribution by air no longer requires an airstrip. High technology has reached airdrop processes, and this could significantly reduce the risk.

Specifically, US airpower is undergoing a "revolution in airdrop technology."[290] The Joint Precision Delivery System (JPADS) is a system for which the Army serves as technical manager[291] (but which was developed from Air Force basic research[292]). It allows precision airdrop from 24,000 feet and higher—well above the threat altitudes that bedevil rotary-wing operations.[293] Thus, JPADS diminishes the enemy's opportunity to inflict casualties. *USA Today* reports, "The precision airdrop system is seen as a way of minimizing danger to convoys, which are frequent targets of roadside bombs. It can also quickly resupply troops on the far-flung battlefields."[294] While JPADS will probably never replace surface convoys, experiments will soon begin with bundles weighing up to 60,000 pounds. This leads experts to conclude, "The sky is the limit on where this can go for improving operations on the battlefield".[295]

Beyond using airpower to supply vital locations, airmindedness may provide innovative approaches to enhance the security of fixed locations.

Consider Airminded Approaches to Securing Fixed Locations

Of particular relevance to COIN operations—and especially with respect to securing the oil-spot locations—is the transformation Air Force Security Forces (SF) have undergone. It is quite true that today's SF career field "barely resembles its own Air Force specialty code from a decade ago."[296] As a result of policy decisions in the 2005 timeframe now enshrined in joint doctrine,[297] the Air Force was obliged to take over responsibility to defend air bases "outside the wire."

Airmen have shown that when the issue is ground defense of a fixed location, they can succeed by applying airmindedness. Specifically, the Air Force applied its own organizational theory and technological expertise to develop a unique approach to air base defense. It was demonstrated with great success at Balad Air Base, Iraq, during Operation Safeside,[298] a 60-day drive to quell hundreds of mortar and rocket attacks launched from a particularly vexing sector of the perimeter. According to the Airmen involved, the operation's achievements:

> Dispelled the perception that Army units are better organized, trained, and equipped than Air Force security forces to conduct such operations. Unlike previous Army units, the task force achieved the desired effect.[299]

The Air Force now has specially-trained ground-force units, including the airborne-capable 820th Security Forces Group,[300] ready to apply its distinctive approach to securing particular areas from insurgent attacks, an obvious advantage in COIN situations.

The Air Force continues to look for other technological solutions especially suited for the COIN environment. Currently, Security Forces are testing the Active Denial System which is designed "to engage and repel human targets by projecting a beam of energy that creates an intolerable heating sensation on the skin."[301] This is technology originally developed by the Air Force Research Laboratory.[302] Those who would

seek to drain money out of technological research would do well to remember all the war-fighting advantages it has produced.

Technology requires training. FM 3-24 rightly emphasizes training, and Airmen may have ideas to complement the doctrine in that regard.

Consider Innovative Training Options for Iraqis

FM 3-24, like almost all COIN literature, emphasizes the importance of training host-nation security forces.[303] It does, however, speak in terms of "local training centers."[304] Training Iraqis in Iraq is difficult.[305] Technology is available that can facilitate such training,[306] but even high-tech solutions are impeded by the "lack of security in some places as well as the sectarian violence."[307] Moreover, US trainers embedded with Iraqi forces are particularly vulnerable.[308]

It may be useful, therefore, to consider other options. One would be to train more Iraqis, perhaps thousands more, outside of Iraq. Such training ought to target junior and mid-level officers and NCOs. These are Iraq's security forces' real future, and they could themselves become in-country trainers, reducing the US footprint as Admiral Fallon desires.[309]

Col Pete Mansoor,[310] a COIN expert who was one of FM 3-24's drafters, discussed the advantages of training outside of Iraq in a 2005 interview:

> The great advantage is the security is much better. You don't have to guard the installation to the degree you have to in Iraq…. Another advantage is if it's staffed by foreign officers, they don't have to come into Iraq and become targets in order to teach. Also, existing facilities can be used that don't require a lot of renovation or rebuilding, as is the case with many buildings in Iraq.[311]

Moving training out of Iraq—to include, as appropriate, to the United States—fits with an airminded approach because of its strategic

advantages. It is better configured for the Long War because it would deny the enemy the opportunity to cause American (and to some extent Iraqi) casualties, and would reduce the deployment tempo for US troops.

Furthermore, one of the most difficult yet essential tasks in Iraqi force development is the inculcation of "values and ethics."[312] As already indicated, avoiding the stresses and dangers of a combat zone could only lessen the difficulty. In addition, moving training to locations where the values and ethics to be taught are the norm should further increase the probability of their inculcation. If, for example, training occurred in the United States, Iraqis could experience first-hand the ideals of a free society—a great way to win hearts and minds.

Airmen (as do members of other armed services) have a long tradition of training foreign military personnel that has proven to be an effective way of building positive relationships. Because many Iraqis do not speak English, however, language can be an obstacle in establishing US-based training.[313] Fortunately, in the Air Force there is precedent for conducting training in a foreign language, the Inter-American Air Forces Academy (IAAFA).[314] Importantly, IAAFA provides "exposure to the US culture, government, and peoples"[315] to members of foreign militaries. To date, however, there is no Arabic counterpart to IAAF, and that should change.

Obviously, prudent steps would need to be taken to ensure Iraqis are properly vetted and are not able to desert the training.[316] The training might also be used to promote national unity, which is needed because the concept of national identity is still "overshadowed by tribe, imam, family, and ethnicity."[317] Thus, it would be helpful to configure the classes with mixed ethnic groups so as to, again, promote pluralism and begin the long evolution from tribal identities to a true, national allegiance—the absence of which is one of the real stumbling blocks in standing up Iraqi (and other host-nation) COIN forces.

This same concept may have application beyond training counter-insurgency forces. FM 3-24 emphasizes the importance of establishing

host-nation governmental institutions. The problem is, again, training a new generation of Iraqis with technical skills as well as loyalty to a greater Iraq. As with military forces, building such a cadre amid the chaos of today's Iraq is extremely difficult.

It may be possible to synergize productively the need to train civilian Iraqis for governmental duties with the US forces' need for translators. Language skills are so central to the COIN effort that FM 3-24 dedicates an appendix (one larger than the airpower appendix) to linguistic support.[318] Huge resources are being applied against this problem. The Army alone is issuing a $4.6 billion contract for translation services.[319]

Perhaps a portion of that money could be diverted to bring Iraqis to the United States for language training as well as schooling in governmental tasks. This idea would require that the trainees provide some period of service as a translator—perhaps in an Iraqi ministry or for COIN forces with the approval of Iraqi government.

Diverting even a quarter of the sum earmarked for translators for US forces could provide thousands of Iraqis the same opportunity to gain exposure to the US culture, government, and people and to build personal relationships with American counterparts as military programs have done for members of other foreign armed forces.

Advanced translation technology donated to the US military may be able to mitigate the short-term complications this plan might engender.[320] Technology also speaks to one of the most difficult problems in the COIN fight: intelligence.

Do Not Overemphasize Human Intelligence

Like virtually all COIN writings, FM 3-24 contends that counter-insurgency is "an intelligence-driven endeavor."[321] It favors human intel-ligence (HUMINT)[322] declaring that "all Soldiers and Marines [function] as potential collectors"[323] and that "during COIN operations, much

intelligence is based on information gathered from people."[324] This is consistent with Army COIN literature that designates HUMINT as "being the priority effort" for intelligence professionals.[325]

Certainly, Airmen do not discount the value of human intelligence, and readily agree that in "many cases HUMINT is the best and only source of adversary intentions."[326] Airmen, nevertheless, consider it only one contributor to the overall intelligence, surveillance, and reconnaissance (ISR) picture. They view HUMINT's main use as "amplify, clarify, or verify" information[327] collected by technical assets, of which the air component has many, both airborne and space-based. As the air component usually has little in the way of HUMINT resources, it relies primarily on other government agencies for it.[328]

If it sounds like Airmen have less enthusiasm for HUMINT than do the COIN aficionados, consider the observations of historian John Keegan in his magisterial book, *Intelligence in War: Knowledge of the Enemy from Napoleon to Al-Qaeda*.[329] Keegan notes, somewhat surprisingly, "Human intelligence played almost no part in determining the conditions under which most of the campaigns which form the case studies in [this] book were fought."[330] Even more remarkably, Keegan goes on to warn that "intelligence, however good, is not necessarily the means to victory."[331]

This is especially so if HUMINT is overly relied upon. As FM 3-24 realizes, HUMINT can be the source of misinformation, sometimes deliberate. There are indications that this has occurred in Iraq, and with counterproductive results.[332] Obviously, there are many reasons HUMINT may be unreliable, and its accuracy may largely depend on the subjective reasoning of the source as to what to say to COIN forces.

Practical problems of collecting HUMINT clearly emerge in an occupation scenario, especially as in Iraq where support for US forces is not strong. According to an Army officer who served in Iraq, there are limits to what a "PFC with an M16" can accomplish in terms of intelligence collection, to include that he "cannot make the Iraqis willing

to risk disclosing the locations of known insurgent cells when they do not believe in the US mission."[333]

Lt Gen Ronald Burgess, a senior Army intelligence officer, acknowledges that the COIN environment lends itself to HUMINT, but "that doesn't mean you have to do that at the expense of national technical collection."[334] Intelligence developed from technical sources may, in fact, be *more* reliable. For example, listening to what insurgents say to each other—unfiltered by a human intermediary source—may provide better insights. The same is true for imagery, especially when provided in real-time as airborne platforms are capable of doing. Increasingly, innovation plays an important role as fighters and other "aircraft [perform] in non-traditional ISR roles with their electro-optical and infrared sensors."[335]

Technical intelligence gathering offers the possibility of achieving an asymmetrical advantage over opponents who either are unaware of its capabilities or underestimate them. According to experts, "Digital footprints terrorists leave behind on laptops, cell phones, and Palm Pilot-type devices are providing a means to find them."[336] Just such lack of knowledge may have been fatal to the insurgent leader Abu Musab al-Zarqawi, who was killed in an air attack in June of 2006.[337] Journalist Mark Bowden reports:

> Electronic intercepts may have helped confirm that Rahman was meeting with Zarqawi in the house (the terrorist leader never used cell phones, which are relatively easy to track, but he did use satellite phones, which are harder to pinpoint, but not—as he apparently assumed—impossible).[338]

Events like this emphasize the *psychological dimension* of technical intelligence collection; that is, insurgents never really know the capabilities of the collection systems and, therefore, are forced to assume that they are always being monitored. In fact, airpower's capability to *persistently* collect is increasingly pervasive with the advent of long-

duration airborne platforms like Global Hawk[339] and full-time, persistent space-based systems to complement other technological means.

Among other things, this persistence and invasiveness help to inflict stress and Clausewitzean "friction" upon insurgent operations. When combined with HUMINT operations that generate distrust and suspicion among enemy leaders, the intelligence collection process itself can become *weaponized* to add value to the COIN fight beyond the data collected.

Optimally, HUMINT and technical intelligence capabilities will be well-coordinated in COIN operations. Unfortunately, *Inside the Pentagon* claims that the lack of coordination between the two has "frustrated military personnel at all levels of command" and has "hampered U.S. effectiveness in Iraq."[340] Maximizing these capabilities will clearly benefit the COIN war fighter. Likewise, merging intelligence and operations efforts is, as Gen Lance Smith, commander of Joint Forces Command, put it, "one of the critical elements of being able to fight this long war." [341] Intelligence-sharing technologies can aid that process.

In this vein, Secretary of the Air Force Michael Wynne is calling for development of what he terms, "spherical situational awareness."[342] This is accomplished by tightly integrating and orchestrating a variety of sensors and information systems to create "a comprehensive view, at once vertical and horizontal, real-time and predictive, penetrating and defended in the cyber realm."[343] As discussed below, the "cyber realm" is extremely important to winning the COIN fight.

Maximize Airmen's Expertise in Cyberspace and Information Operations

Cyberspace, the "physical domain within the electro-magnetic environment,"[344] is the newest entry to airpower's portfolio. To this end, the Air Force has established a cyberspace command[345] aimed at maintaining dominance not just in communications and information technology but also "superiority across the entire electromagnetic

spectrum."[346] Given the "inherently technical … nature" of cyberspace operations,[347] it fits naturally with the culture of Airmen.

Moreover, cyber operations are a direct expression of an airminded approach. As the Air Force's draft doctrine on irregular warfare points out, "Like air operations, cyber operations can strike directly at the node of interest without first defeating 'fielded forces.'"[348] Properly executed, cyber operations minimize the enemy's opportunity to inflict casualties that might otherwise result from close combat.

Consequently, in perhaps no other area is the anti-technology view of some COIN traditionalists more off target.[349] Actually, in the cyber arena, high technology is not only central to peer-competitor, conventional war; it is also one of the most revolutionary features of putatively low-tech COIN environments. Max Boot, the author of *War Made New: Technology, Warfare, and the Course of History, 1500 to Today*, points out that Islamist insurgents rely heavily on information technologies that "barely existed in 1980."[350] Gen Ronald Keys, the commander of Air Combat Command, provides more detail:

> The terrorists are using cyberspace now, remotely detonating roadside bombs. Terrorists use global positioning satellites and satellite communications; use the Internet for financial transactions, radar and navigation jammings, blogs, chat rooms and bulletin boards aimed at our cognitive domain; e-mail, chat and others providing shadowy command and control; and finally overt and covert attacks on our servers.[351]

Airmen work to place an "'information umbrella, over friends and foes alike."[352] Although in many areas there are legal constraints as to what may be done in cyberspace, such restrictions may be less of an issue in Iraq. Lt Gen Abboud Gamber, the Iraqi commander in charge of the

Baghdad security effort, declared that under Iraqi law the government could "search, control, and seize all parcel post, mail, telegraphs, [and] communication devices as needed."[353]

Information operations (IO) are integral to cyberspace capability, and Airmen, especially in the Air Force, consider them a "distinctive capability" of their component.[354] Thus, an airminded approach would look for opportunities to exploit technological means to "influence, disrupt, corrupt, or usurp" the unconventional kinds of command and control systems insurgents are using.[355]

If, as is recommended above, high-risk clearing operations are to be minimized, an aggressive airminded approach may be required to prevent "uncleared" areas from becoming electronic command and control sanctuaries. One author offers an "extreme proposal" that could be worth considering: "completely shut down the information grid in the insurgent areas—telephones, cellular towers, and so on."[356] The proposal raises complex issues but does have the attractive feature of being virtually casualty free.

Information Operations and Strategic Communication

For Airmen, IO includes "influence operations" (although they are separate from traditional public affairs functions).[357] Unfortunately, this is an area where the United States has been particularly unsuccessful.

In January 2007, *Newsweek* headlined, accurately, that the United States is "Losing the Infowar" in Iraq.[358] This difficulty is not a new one,[359] but what is especially frustrating about the report is that the insurgents, as General Keys also notes, are exploiting *technology* to defeat American efforts. Specifically *Newsweek* says, "Insurgents using simple cell-phone cameras, laptop editing programs and the Web are beating the United States in the fierce battle for Iraqi public opinion."[360]

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As suggested above, extreme measures can be taken to deny insurgents access to, or use of, these technologies. Some situations, such as a reported unauthorized television station broadcasting from within Iraq, ought to be relatively easy to interdict technically (although it has evidently proven difficult).[361] This station's anti-American invective has made the broadcast outlet the "face" of the insurgency within Iraq.[362] Shutting it down would appear to clearly benefit the COIN effort[363] and would seem to be in keeping with democratic values.

In any event, shutting down such sources may be the only way to control enemy propaganda that is dangerously inciting violence in certain areas. If such action is taken, a low-tech airpower means might be used to replace, in part, the information the host-nation population would lose: air-delivered leaflets—a technique that already has been used with success in Iraq.[364] Additionally, Commando Solo[365] aircraft can broadcast appropriate messages to otherwise denied areas.

More problematic is utilizing military deception at this point in Iraq. Although an internationally-accepted means of warfare,[366] care must be taken to ensure it complies with US[367] and Iraqi law, as well as the political aims of both countries. Still, COIN expert Bard O'Neill advises that "propaganda and disinformation campaigns" to discredit insurgent leaders can be effective.[368]

This is another idea that is not especially new. Back in 1995 Thomas Czerwinski, then a professor at the School of Information Warfare of the National Defense University, postulated one scenario: "What would happen if you took Saddam Hussein's image, altered it, and projected it back to Iraq showing him voicing doubts about his own Baath Party?"[369] If this concept can be updated effectively to apply to today's insurgent leaders in Iraq, it deserves careful consideration.

Influence operations must also have positive, accurate messages—what might be called a "compelling counter-narrative."[370] Such a narrative helps to separate the insurgents from sources of support, an aim of many COIN

strategies.[371] In Iraq, this is an especially complex task as there may be, as one analyst put it, as many as four "wars" ongoing simultaneously.[372] These different wars overlap but vary widely. Designing messages and selecting targets for them that would have the effect of disrupting or even severing the support insurgents need is extremely difficult.

Cultural and Democratic Considerations:
Reaching out to Women

There does appear to be one segment of the Iraqi population cutting across groups and sects that is a potential US ally: women. Women are arguably the largest oppressed group in Iraq,[373] and war widows are especially suffering now.[374] Most experts agree that women have much to lose if extremists take hold.[375]

Reaching out to women is an idea that has resonance in classic counterinsurgency theory. David Galula's *Pacification in Algeria: 1956-1958* discusses just such an effort with subjugated Kabyle women during France's Algerian COIN operation.[376] Furthermore, recent scholarship indicates that empowerment of women leads to clear economic and political gains, particularly when they assume leadership roles.[377] In today's Algeria, Muslim women are emerging as the nation's "most potent force for social change [and are] having a potentially moderating and modernizing influence on society."[378]

Positive messages to women about the value of a democracy that respects individual rights and offers opportunities for participation must be matched with complementary action. One innovative possibility would be to establish secure compounds, along the lines of the Rule of Law Complex discussed above, explicitly designed to aid women. Among other things, providing a secure environment for women's educational and organizational opportunities could catalyze the winning of the hearts and minds of a potentially decisive part of Iraqi society.

To be sure, many influential Iraqis oppose women's rights. Edward Luttwak reports that clerics say that women's rights are "only propagandized [by the United States] to persuade Iraqi daughters and wives to dishonor families by imitating the shameless nakedness and impertinence of Western women."[379] Nevertheless, there may be real opportunity to reach out to a substantial portion of the population that could benefit greatly. This could be the kind of hearts-and-minds initiative that should be proactively explored to achieve COIN success.

Develop Truly Joint Approach that Respects the Airman's Expertise

To some observers FM 3-24 raises the issue of control of airpower. According to *Air Force Magazine*, for example, the manual argues, in effect, "that airpower is best put under control of a tactical ground commander or, at the highest level, the multinational force commander, but not an airman."[380] Actually, FM 3-24 does not explicitly make that assertion, though clearly its overall tenor is that all aspects of the COIN fight are within the ground commander's purview.

Of course, to Airmen it is an article of faith, embedded in doctrine, that "Airmen work for Airmen" so as to preserve the principles of unity of command and simplicity.[381] Regardless of what one may think of *Air Force Magazine*'s contention about FM 3-24 and the control of airpower, the important point is that the airmindedness of Airmen can ensure that the full capabilities of airpower are brought to bear on the COIN challenge.

To ensure the Airman's expertise is properly utilized requires building greater trust between the ground and air components. To do that, however, means overcoming what seems to be an entrenched belief among some in the Army that the Air Force disdains close air support. This is ironic since, for example, about 79 percent of the targets struck by airpower during OIF fell into that category.[382] Also troubling is Lt Gen Tom McInerney's (USAF, retired) report of signs that the Army wants to build, in effect, its

own "air force"[383]—even though the Army has not always demonstrated the same level of expertise in handling aviation assets as it has with ground forces.

A recent example from OIF might prove instructive. In a just-published article in Joint Forces Quarterly,[384] Maj Robert J. Seifert points out that today AC-130[385] gunships are controlled by ground commanders who limit them to providing air cover to specific units. This makes the aircraft unavailable to attack emerging targets in another unit's area of operations. Major Seifert contends this is something of a reversion to the airpower control practices that proved so inefficient in North Africa during World War II. Seifert suggests a more airminded approach: allow the gunships to achieve their full potential by putting the weapon in an "on call" status continually linked to JTACs in several units (or other aircraft) so that each sortie can be optimized.[386]

It is not necessary to break up the synergy of dedicated air/land/sea organization of the special operations forces (SOF) to address Major Seifert's concerns. Establishing joint policy that SOF-assigned airpower capabilities in excess of SOF requirements will be made available to the air component for planning and execution (similar to existing joint doctrine regarding Marine Corps aviation) would be a good start. In addition, tighter relationships with the AOC could make sorties more adaptable to real-time dynamics and, therefore, more productive. Leveraging today's communications capabilities and linkages may provide opportunities not heretofore possible.

Today's AOCs give Airmen the unique ability to "see" the overall theater of operations and to communicate with the many air platforms. All of this enables Airmen to rapidly exploit a central advantage of airpower: flexibility. Still, there is no substitute for planning because the complexities of twenty-first century air operations are daunting and require special expertise.

The reality is that American ground-force commanders often do not understand how to use airpower effectively and efficiently. Consider the Army's nearly-disastrous Operation Anaconda in Afghanistan. It appears from Seymour Hersh's *Chain of Command* that Army leaders mistakenly thought that they "could do [the operation] on [their] own,"[387] with little air component assistance.

As a result, the air component was brought into the planning process very late and was not permitted to conduct major preparatory strikes.[388] Although fixed-wing airpower eventually rescued the operation from serious difficulties and accounted for most of the terrorists killed,[389] the Army commander nonetheless denigrated the Air Force's efforts in a subsequent magazine interview.[390]

What the interview really demonstrates is the degree to which this senior ground commander lacked sufficient understanding of airpower capabilities to ensure optimal planning. Although Ben Lambeth's analysis of Operation Anaconda in *Air Power Against Terror* was too gentle, it still concluded that "those who planned and initiated Operation Anaconda failed to make the most of the potential synergy of air, space, and landpower that was available to them."[391] Indeed, that unfamiliarity—reflected in FM 3-24's airpower annex—evidently persists.

As documented in daily news, today's airpower capabilities often amaze ground commanders. One candidly expressed his astonishment about an incident in Iraq where an F-15 used its sensors to follow individual insurgents as they tried to hide in reeds near a river. The commander related: "I'd walked in the dark within ten feet of one guy and [the aircraft] sparkled the target right behind me, told the [ground controller] to tell me to turn around."[392] He was then able to capture the otherwise hidden insurgents.

Given the myths about airpower in FM 3-24, it is unsurprising that ground commanders are not being educated on its potential. This is hurting the COIN effort. One battalion commander admitted that in his first few

months in Iraq he "rarely put air into [his] plan … because [he] did not understand how it could assist us in the counterinsurgency fight."[393]

When it does consider airpower, FM 3-24 clearly favors rotary-wing options. For example, it speaks of "technological advances" that "greatly [increase] the accuracy and utility of helicopter airdrops" for sustainment. Unfortunately, the survivability of helicopters is becoming increasingly suspect. One of the few Iraqi successes during the conventional phase of OIF occurred in March of 2003 when Iraqis used ordinary cell phones to orchestrate an ambush of Apache helicopters[394] that left 27 of 33 unable to fly.[395]

Even more disturbing are 2007 reports that Iraqi insurgents are fielding capabilities that exploit rotary-wing vulnerabilities.[396] Although Army attack helicopter enthusiasts continue to argue for the efficacy of the weapon in the close fight,[397] it seems Air Force fixed-wing aircraft like the A-10[398] (which is highly survivable in the COIN environment) are more prudent choices for the strike mission.[399]

Airmen controlling airpower produces a unique benefit for the COIN fight because it allows counterinsurgency forces to capitalize on a gap in insurgents' understanding of military power. In fact, COIN forces can dominate thanks to airpower's asymmetric advantage if Airmen are allowed to exercise their expertise advantage. Doing so has great potential because there are few examples of insurgents who really understand the capabilities of modern airpower. Such gaps have caused insurgents to make catastrophic mistakes.

There is no reason to believe Iraqi insurgents have any particular expertise in high-technology, fixed-wing airpower, even among elite members of the former regime's armed forces. In the aftermath of the destruction of the Republican Guard by air attack during OIF, a stunned Iraqi Army officer expressed his frustration about his leadership: "They forgot we were missing airpower. American technology is beyond belief."[400]

And More

There are many other possibilities to creatively exploit airpower and technology to the benefit of the counterinsurgency effort, and especially those capabilities that would reduce reliance on American boots-on-the-ground. Some of these innovations are already in use or are nearing readiness to enter the fight. A few examples follow.

Protecting Iraqi infrastructure has been a major challenge[401]—and one that COIN efforts historically have faced. Today's airpower, however, has the persistence and the ability to use technology to leverage the ratio of force to space—elements proven to be critical to effective COIN strategies.[402] Thus, techniques like employing patrolling fighter aircraft to conduct "infrastructure-security missions" instead of simply orbiting while awaiting calls[403] is the kind of innovation that can help secure vital Iraqi oil and electricity systems. To do so successfully still requires ground forces, but in smaller numbers than would otherwise be needed because of the size of the areas involved.[404]

Most COIN studies emphasize the need for border security.[405] In a new preface to his classic history, *A Savage War of Peace: Algeria 1954-1962*, Alistair Horne notes that there is a parallel to that conflict and the insurgency in Iraq: the importance to the insurgents of support from other countries.[406] Airpower can assist in degrading the insurgents' ability to obtain assistance from abroad by surveilling borders and interdicting unauthorized transits. As with infrastructure protection, airpower can obviate the need for large numbers of surface forces. The newly-fielded MQ-9 Reaper[407] appears ideally suited to provide the persistence this surveillance mission requires, as well as the ability to take decisive kinetic action when needed.

Beyond interdicting cross-border transits, airpower can deter nations disposed to assist the insurgency. Even if one assumes, as James S. Corum and Wray R. Johnson do in *Airpower in Small Wars*, that COIN conflicts "rarely present lucrative targets for aerial attack, and even more rarely is

there ever a chance for airpower to be employed in a strategic bombing campaign or even in attack operations on any large scale,"[408] that is not the case with nation-states supporting insurgents. They present a surfeit of targets and have economies vulnerable to air-delivered coercion.[409]

This latter truth raises another aspect of airpower: it is the ultimate Plan B. FM 3-24 identifies "protracted popular war" as one of the common insurgent approaches. In Phase III of this method, insurgents "transition from guerilla warfare to conventional warfare."[410] Because insurgents rarely have much capability or experience with airpower,[411] they are especially vulnerable to the air weapon during this stage.

Not every insurgent movement passes through this "conventional" stage— and it is even questionable whether some ever intend to take over the governments they are attacking.[412] Nevertheless, at some point most insurgencies seek to assume power. If for some reason they succeed, airpower can debilitate—if not destroy—their ability to function as a government or to threaten US interests. What Col Jeffrey Barnett argued in 1996 is just as true today: "It's important to emphasize the ability of high-technology airpower to deny insurgent victory over an extended time with minimal risk of US casualties."[413]

Finally, Professors Metz and Millen contend that containment strategies may be "more logical"[414] than other approaches in "liberation" insurgency scenarios (which appear to be analogous to David Kilcullen's "resistance warfare" insurgency[415]) such as today's Iraq. Air and naval power proved quite effective enforcing the "no-fly zone" and sanctions against Iraq,[416] and—in conjunction with ground-force raids and strikes—could again provide a way to protect US interests by containing the effects of an insurgency in Iraq or elsewhere.

Obviously

This is certainly not a complete list of all the possible considerations an Airman would bring to an airminded COIN doctrine or, quite possibly, not

even the most important ones. Some or all might properly be viewed as tactics, techniques, and procedures as opposed to doctrinal elements. At best, this is a list of illustrations to show how an Airman's perspective could *enlarge and enhance* FM 3-24 into a more joint approach to how the difficult problem of counterinsurgency in the twenty-first century might be addressed.

Concluding Observations

Notwithstanding the critiques of FM 3-24 in this essay, it remains a stellar work of scholarship and military theory that skillfully presents the ground force perspective. What is more is that it is plainly appropriate and fully workable in certain situations—especially for armies in COIN fights where the United States is not involved and modern airpower capabilities are not available.

Of immediate concern, however, is whether the media's designation of FM 3-24 as The Book for Iraq is the right characterization.[417] As valuable as FM 3-24 may be in other circumstances, a doctrine that calls for enormous numbers of American troops to wage counterinsurgency for "a generation" in Iraq should not be the *only* "blueprint"[418] military professionals are offering decision-makers.

Yes, a troop "surge" may afford some temporary relief in Iraq, but the surge is not, *per se*, an implementation of FM 3-24's hearts-and-minds strategy. It is purely the application of military force, something the manual rejects as a COIN solution. It is a mistake to interpret whatever success the surge produces as necessarily being a validation of FM 3-24's main theories.

Of course, Airmen do not disagree that the application of overwhelming military force can eventually crush *any* insurgency.[419] The problem is that

a COIN strategy that requires massive numbers of *American* boots-on-the-ground is not *sustainable*—nor should it be sustained. In a world where existential threats to US interests are emerging, a commitment of blood and treasure for an extended period cannot be justified if it means compromising the ability to confront the gravest threats.

This is emphatically *not* a plea to abandon the counterinsurgency effort in Iraq. Rather, it is a call for the full potential of airpower to be integrated into a more complete joint and interdependent COIN doctrine to address the conundrum of Iraq.[420] Maximizing airpower in all its dimensions represents one of the few possibilities to either provide near-term success of the military element of an overall COIN strategy or, alternatively, provide a military component with "staying power" that is sustainable (along with a smaller ground presence) over the length of time ground-component COIN experts believe is required.

Again, the challenge for military strategists is to devise *pragmatic* options *within the resources realistically available* to political leaders. Because airpower's capabilities, as well as the Airman's way of thinking, have at least the potential to reduce the difficulties occasioned by large numbers of American boots-on-the-ground, they ought to be fully explored.

Accordingly, beyond Iraq, a truly joint doctrine needs to be re-aligned to produce more realistic and *efficient* COIN options for the United States in the twenty-first century. The doctrine must fit within an overall defense strategy that faces multiple and diverse demands across the spectrum of conflict.

Airmen agree that FM 3-24 brilliantly re-enforces innumerable tactical and operational considerations vital to any military operation. Moreover, it would be churlish and wrong, for example, to find fault with any effort to improve leadership and ethics as chapter 7 of the manual does.[421] In fact, the inclusion of such guidance is one of FM 3-24's many strengths and should find a place in joint COIN doctrine.

What is, however, a concern is that FM 3-24 is being used (albeit not by its drafters) as a rationale to inflate the size of the Army and Marine Corps, a development that threatens to drain resources and energy away from airpower and other high-tech defense capabilities.[422] One need not doubt, as one of the contributors to FM 3-24 insists, that the writers of the doctrine had "no strategic agenda"[423] to nevertheless conclude that it is having strategic *effect*.

Shortly after FM 3-24's issuance, the President called for increasing "the size of the active Army and Marine Corps, so that America has the Armed Forces we need for the twenty-first century."[424] A day later, the secretary of defense requested increases over the next five years of 65,000 Soldiers and 27,000 Marines to "provide the necessary forces for success in the long war on terror."[425]

Yet decisions today—based on FM 3-24 or anything else—to enlarge the ranks of US ground forces will not make them available in time to make a difference in Iraq.[426] As one editorial put it:

> The buildup will do nothing to ease the current operational stresses caused by the war in Iraq. Even the Pentagon concedes it will take five years fully to recruit, train, and equip new units, so no new forces will enter the operational flow anytime soon. To the extent the sky is going to fall, it has already fallen.[427]

More importantly, are more ground forces to fight lengthy irregular wars the most critical capability for "the Armed Forces we need for the twenty-first century"? For all its seeming deference to Mao, Sun Tzu, and the Oriental way of war, FM 3-24 is, ironically, precipitating a national security architecture quite different from that the Asian heirs to FM 3-24's sources are implementing.

As it stands now, the United States is planning to increase its low-tech ground forces at the same time China, the twenty-first century's emerging

superpower, is increasing its defense budget[428] but *shrinking* its ground forces in favor of high-tech weaponry,[429] and especially advanced airpower.[430] In fact, according to DOD, China is in the process of transforming the People's Liberation Army from "a mass army designed for protracted wars of attrition … to a more modern force capable of fighting short duration, high intensity conflicts against high-tech adversaries."[431]

Although *USA Today* reported in the fall of 2006 that 42 percent of the active duty Army—some 210,000 troops—had yet to deploy to either Iraq or Afghanistan,[432] ground-force zealots continue to call for swelling the ranks of the US ground component *at the expense of airpower*.[433] How much traction such arguments gain is still to be seen but, regardless, in light of FM 3-24 it is clear that Airmen have much work to do in educating the joint team—and especially those drafting the new joint COIN doctrine—as to what airpower has to offer.

It is equally or even more important for Airmen to inform *themselve*s of the intricacies of counterinsurgency, and particularly the challenges from the *ground* perspective. Airmen should not expect the land component, even if educated on airpower capabilities, to devise applications that will optimize air weapons.[434]

The development of FM 3-24 also ought to serve as a "wake up call" for all Airmen to work harder to better develop warfighter-scholars. The ground component—the Army in particular—has done a superb job of creating a cadre of experts with phenomenal academic credentials who are informed by the "ground truth" of high-intensity combat experience.[435] Journalist Tom Ricks calls them a "band of warrior-intellectuals"[436] and he is absolutely right. For its part, the Air Force tends to have Airmen with one qualification or the other, but rarely both. That must change.

In addition, during the conceptualization phase of FM 3-24's creation, the drafters assembled an "odd fraternity" of experts.[437] This "unusual crowd" included "veterans of Vietnam and EI Salvador, representatives of human

rights nongovernmental organizations (NGOs) and international organiza-
tions, academic experts, civilian agency representatives, [and] jour-
nalists."[438]

Debates may rage as to the degree to which Airmen were included, or
should be included, in the writing of a component manual such as FM 3-
24. (Especially, one that is actually employed in the field as more than
simply service doctrine.) Nevertheless, including the perspectives of
persons outside the military community during the drafting process was a
great innovation by the Army and Marine Corps. The complexities of
twenty-first century, information-age conflicts make this idea well worth
emulating, and it should be used in writing the new joint doctrine.

Finally, Airmen—and airpower—will be most effective in the COIN fight
if they are accepted as equals on a *genuinely* joint and interdependent
team. This is why the development of joint COIN doctrine is so important
to Airmen. It is imperative, however, that Airmen avoid—at all costs—
creating the impression that they are advocating a COIN solution that
involves Airmen or airpower for their own sake.

In the end, the need for truly joint counterinsurgency doctrine is *not* about
Airmen or airpower being "shortchanged." If we fail to bring the best
thinking of the *whole* armed forces—along with the available capabilities
of *all* the services—appropriately to bear in Iraq or any COIN conflict, it
is the American people who are being shortchanged. We cannot allow that
to happen, and that is why drafting an authentically joint COIN doctrine is
of paramount importance.

End Notes

[1] Gen. Peter Schoomaker, *Ground Truth*, GOVEXEC.COM, September 14, 2006 (interview) *available at* http://www.govexec.com/features/0906-15/0906-15s1.htm (last visited May 21, 2007).

[2] Headquarters Department of the Army, Field Manual 3-24, *Counterinsurgency*, December 15, 2006, [Hereinafter FM 3-24], *also designated by* Headquarters Marine Corps Development Command, Department of the Navy, as Marine Corps Warfighting Publication 3-33.5, 1 *Counterinsurgency*, December 15, 2006, *available via* Jim Garamone, "Army, Marines Release New Counterinsurgency Manual," American Forces Information Service, December 15, 2006, *available at* http://www.defenselink.mil/news/NewsArticle.aspx?ID=2453 (last visited May 21, 2007) (hyperlink to "Counterinsurgency Manual" at bottom of the press release).

[3] *See e.g.,* Samantha Power, "Our War on Terror," *New York Times Book Review*, July 29, 2007, available at http://www.nytimes.com/2007/07/29/books/review/Power-t.html?ex=1186632000&en=95986053f4af8b0b&ei=5070 (last visited August 7, 2007) (reviewing a commercial publication of FM 3-24).

[4] *See* notes 12 and 13, *infra*, and accompanying text.

[5] *See* notes 56 through 59, *infra*, and accompanying text.

[6] Frank Hoffman, "Non Cents," *Small Wars Journal*, May 23, 2007, (blog) *available at* http://smallwarsjournal.com/blog/2007/05/non-cents-1/ (last visited May 24, 2007).

[7] *See, e.g*., Major Randall A. Hodge, *Can Too Much Jointness Disjoint the Marine Corps?*, Marine Corps University Command and Staff College 1995, *available at* http://www.globalsecurity.org/military/library/report/1995/HRA.htm (thesis) (last visited January 29, 2007).

[8] *See e.g.,* Gordon Lubold, "New Health Care Plan Stops Shy of Unification," AIRFORCETIMES.COM, January 1, 2007, ("Air Force leaders balked at Joint command proposal.") *available at*

http://www.airforcetimes.com/issues/stories/0-AIRPAPER-2436664.php (last visited January 29, 2007).

[9] Thomas E. Ricks, *Fiasco: The American Military Adventure in Iraq* (Penguin, 2006) at 18-22.

[10] When the word "Soldiers" is capitalized in this essay it is meant to refer to infantrymen of the US Army (and, usually, Marine Corps). When "soldiers" is not capitalized, it is meant to refer to infantrymen or land warriors generically without reference to a particular service or country.

[11] For a scathing indictment of Army leadership in Iraq *see* LTC Paul Yingling, USA, "A Failure of Generalship," *Armed Forces Journal*, May 2007, at 16, *available at* http://www.armedforcesjournal.com/2007/05/2635198 (last visited May 19, 2007). However, Yingling misperceives the dilemmas of senior military officers in a democracy. *See* Maj Gen Charles J. Dunlap, Jr., *Voices from the Stars? America's Generals and Public Debates*, ABA National Security Law Report, November 2006, at 8, *available at* http://www.abanet.org/natsecurity/nslr/2006/NSL_Report_2006_11.pdf (last visited May 19, 2007).

[12] Dan Ephron, "The Book on Iraq," *Newsweek* (Web exclusive), December 14, 2007, *available at* http://www.msnbc.msn.com/id/16222877/site/newsweek (last visited January 15, 2007).

[13] John McCain, "General David Petraeus," *Time*, May 14, 2007, at 76, *available at* http://www.time.com/time/specials/2007/time100/article/0,28804,1595326_1615513_1615454,00.html (last visited May 19, 2007).

[14] *See* Garamone, *supra* note 2.

[15] FM 3-24, *supra* note 2, at vii.

[16] *See* Garamone, *supra* note 2.

[17] *See* Dan Ephron, "The Military: Conrad Crane," December 25, 2006, *Newsweek National News*, *available at* http://www.msnbc.msn.com/id/16240575/site/newsweek (last visited February 3, 2007).

[18] Ephron, *supra* note 12. *See also*, Garamone, *supra* note 2.

[19] *See* Schoomaker, *supra* note 1. Airpower "is a maneuver element in its own right, co-equal with land and maritime power; as such, it is no

longer merely a supporting force to surface combat." Department of the Air Force, Air Force Doctrine Document (AFDD) 1, *Air Force Basic Doctrine*, November 17, 2003, at 16 *available at* http://www.dtic.mil/doctrine/jel/service_pubs/afdd1.pdf (last visited March 8, 2007). [Hereinafter AFDD 1].

[20] *See* Schoomaker, *supra* note 1.

[21] *Id.*

[22] *See* FM 3-24, *supra* note 2, at 2-19.

[23] A smattering of COIN references appears in Air Force doctrinal documents. *See e.g*., Air Force Doctrine Document 2-3.1, *Foreign Internal Defense*, 10 May 2004, Appendix A, *available at* http://www.dtic.mil/doctrine/jel/service_pubs/afdd2_3_1.pdf (last visited February 22, 2007).

[24] *See* Christine Harrison, *Doctrine Center 'Jump Starts' Irregular Warfare Doctrine*, Air University Public Affairs, March 1, 2007, *available at* http://www.af.mil/news/story.asp?id=123043045 (last visited May 24, 2007).

[25] *See e.g*., Air Force Doctrine Document 2-3.1, *Foreign Internal Defense*, 10 May 2004, Appendix A, *available at* http://www.dtic.mil/doctrine/jel/service_pubs/afdd2_3_1.pdf (last visited February 22, 2007).

[26] *See* Carl Bergquist, *Air University Hosts Counterinsurgency Symposium*, Air University Public Affairs, April 30, 2007, *available at* http://www.af.mil/news/story.asp?id=123051196 (last visited August 7, 2007).

[27] *Id.*

[28] *See* Rebecca Grant, "The Billy Mitchell Syndrome," *Air Force Magazine*, December 2006, *available at* http://www.afa.org/magazine/dec2006/1206syndrome.asp (last visited May 24, 2007).

[29] Charlie Dunlap, "Airmen Must Understand Meaning, Purpose of Airpower to Succeed," *Air Force Times*, December 11, 2006, *available at* http://www.airforcetimes.com/community/opinion/airforce_opinion_dunla p061211 (last visited April 19, 2007).

[30] *See* Col Richard Szafranski, "Interservice Rivalry in Action," *Airpower Journal*, Summer 1996, at 48, 55 *available at*

http://www.airpower.maxwell.af.mil/airchronicles/apj/apj96/sum96/szfran k.pdf (last visited January 29, 2007).

[31] Hon. Togo D. West, Jr., and General Dennis Reimer, *Statement of the Posture of the United States Army 1997*, 1997, Chapter I, *available at* http://www.army.mil/aps/97/ch1.htm (last visited March 17, 2007).

[32] Dennis M. Drew, "US Airpower Theory and the Insurgent Challenge: A Short Journey to Confusion," *Journal of Military History* (October 1998) at 809 *as quoted by* Maj Kenneth Beebe, "The Air Force's Missing Doctrine: How the US Air Force Ignores Counterinsurgency," *Air and Space Power Journal*, Spring 2006 *available at* http://www.airpower.maxwell.af.mil/airchronicles/apj/apj06/spr06/beebe.h tml (last visited April 19, 2007).

[33] Grant T. Hammond, "The USAF and Counterinsurgency," *The Wright Stuff*, June 2006, *available at* http://www.maxwell.af.mil/au/aunews/archive/june/generalJune06/Counte rinsurgency.html (last visited April 2, 2007).

[34] Alan J Vick, et al., *Air Power in the New Counterinsurgency Era* (RAND 2006), at 111 *available at* http://www.rand.org/pubs/monographs/2006/RAND_MG509.pdf (last visited February 20, 2007).

[35] *Id.*

[36] One of the few book-length treatments of airpower in COIN operations concludes, "The support role of airpower … is usually the most important and effective mission in guerrilla war." *See* James S. Corum and Wray R. Johnson, *Airpower in Small Wars* (University of Kansas Press, 2003), at 427.

[37] An exception is Maj Gen Alan G. Peck's superb article, "Airpower's Crucial Role in Irregular Warfare," *Air & Space Power Journal*, Summer 2007, *available at* http://www.airpower.maxwell.af.mil/airchronicles/apj/apj07/sum07/peck.h tml (last visited August 7, 2007).

[38] *See* Department of the Army, *Colonel Peter Mansoor*, Dwight D. Eisenhower National Security Series, (biography) *available at* http://www.eisenhowerseries.com/pdfs/bios/Mansoor.pdf (last visited February 3, 2007).

[39] *See*, *Profile of John Nagl*, AMAZON.COM, February 25, 2007, *available at* http://www.amazon.com/gp/pdp/profile/A1G22L9P0Z3XJP (last visited April 3, 2007).

[40] John Nagl, *Learning to Eat Soup with a Knife: Counterinsurgency Lessons from Malaya to Vietnam* (University of Chicago Press, Revisited. 2005).

[41] *See e.g.,* Rick Atkinson, "Iraq Will Be Petraeus's Knot to Untie," *Washington Post*, January 7, 2007, at A01, *available at* http://www.washingtonpost.com/wp-dyn/content/article/2007/01/06/AR2007010601185.html (last visited Jan. 15, 2007).

[42] *See* Dan Murphy, "New Commander, New Plan in Iraq," *Christian Science Monitor*, February 9, 2007, at 1.

[43] *See* Linda Robinson, "The Petraeus Factor," *US News & World Report*, May 28, 2007, *available at* http://www.usnews.com/usnews/news/articles/070520/28petraeus.htm (last visited May 21, 2007).

[44] General Petraeus signed the Forward of FM 3-24 on behalf of the Army. For a biography of General Petraeus *see,* Mulit-National Force – Iraq (MNF-I), *MNF-I Commanding General*, March 8, 2007, *available at* http://www.mnf-iraq.com/index.php?option=com_content&task =view&id=23&Itemid=16 (last visited March 29, 2007).

[45] *See e.g., infra* note 168, and accompanying text.

[46] Charlie Dunlap, "Get the Fight Off the Ground," *Air Force Times*, February 12, 2007, at 54, *available at* http://www.airforcetimes.com/community/opinion/opinion_airforce_cdunlap070212/ (last visited February 20, 2007).

[47] *See supra* note 34 and accompanying text.

[48] *See* Department of the Air Force, *Air Force Handbook 1*, 2005, at 340 *available at* http://www.e-publishing.af.mil/pubfiles/af/h/afh1/afh1.pdf (last visited March 8, 2007) (defining "Airpower" as "the fundamental ability to use aircraft to create military and political effects through the air and space").

[49] Secretary of the Air Force Michael W. Wynne, Letter to Airmen, November 3, 2005, *available at*

http://www.af.mil/library/viewpoints/secaf.asp?id=191 (last visited March 8, 2007).

⁵⁰ *See Air Force Handbook 1*, *supra* note 48, at 339 (defining "Airman" as "any person who understands and appreciates the full range of air and space power capabilities and can employ or support some aspect of air and space power"). *See also*, Department of the Air Force, Air Force Doctrine Document 2, *Operations and Organization*, 3 April 2007, at 148, *available at* http://www.dtic.mil/doctrine/jel/service_pubs/afdd2.pdf (last visited June 13, 2007). [Hereinafter AFDD 2].

⁵¹ *Id.*

⁵² AFDD 2, *supra* note 50, at 2.

⁵³ *Id.*

⁵⁴ For an explanation of the capitalization of "Soldier" *see supra* note 10.

⁵⁵ *See e.g.*, Smith, *infra* note 215.

⁵⁶ *See* Elaine M. Grossman, "Services Agree to Write Joint Doctrine for Counterinsurgency Ops," *Inside the Pentagon*, May 24, 2007, at 1. *See also* Maj Gen Charles J. Dunlap, Jr, "We Have a Serious COIN Shortage," *US Naval Institute Proceedings*, May 2007, at 162.

⁵⁷ Grossman, at I.

⁵⁸ *Id.*

⁵⁹ *Id.*

⁶⁰ *See* Robert H. Scales, "*To Win the Long War*," *Washington Times*, October 10, 2006, at 21.

⁶¹ According to the *New York Times*, "The spirit of the document is captured in nine paradoxes that reflect the nimbleness required to win the support of the people and isolate insurgents from their potential base of support" *see* Michael R. Gordon, "Military Hones New Strategy on Counterinsurgency," *New York Times*, Oct 5, 2006, *available at* http://www.nytimes.com/2006/10/05/washington/05doctrine.html?ei=5090&en=172062e5d2f1b8d0&ex=1317700800&partner=rssuserland&emc=rss&pagewanted=all (last visited April 17, 2007). The "paradoxes" are found in FM 3-24, *supra* note 2, at para 1-148. According to one commentator, they give the manual a "Zen" quality. *See* Joe Klein, "When Bad Missions Happen to Good Generals," *Time Magazine*, January 22, 2007, at 25 *available at*

http://www.time.com/time/magazine/article/0,9171,1576838-1,00.html (last visited April 17, 2007).

[62] *See e.g*., Department of the Army, *Boots-on-the-ground: Call to Duty, available at* http://www.army.mil/calltoduty/ (last visited February 27, 2007).

[63] "Boots-on-the-ground zealots" are sometimes called "BOTGZ" (pronounced *bow-togs*). The author first used this term in "America's Asymmetric Advantage," *Armed Force Journal*, September 2006, at 20, *available at* http://www.armedforcesjournal.com/2006/09/2009013 (last visited April 2, 2007).

[64] FM 3-24, para 1-67, *supra* note 2.

[65] *See* FM 3-24, Source Notes, at 1, *supra* note 2 *citing* John J. McGrath, *Boots-on-the-ground: Troop Density in Contingency Operations*, Global War on Terrorism Occasional Paper 16, 2006, Combat Studies Institute Press, Ft. Leavenworth, KS, at iii (Foreword), *available at* http://www-cgsc.army.mil/carl/download/csipubs/mcgrath_boots.pdf (last visited May 25, 2007) ("A figure of 20 troops per 1000 of the local population is often mentioned as the standard, but as McGrath shows, that figure was arrived at with some questionable assumption.").

[66] *See* Klein, *supra* note 61.

[67] Linda Robinson, "Why More May Not be Enough," *US News & World Report*, January 22, 2007, at 34, 36 *available at* http://www.usnews.com/usnews/news/articles/070114/22troops.htm (last visited January 18, 2007).

[68] *See* Joint Chiefs of Staff, *DOD Dictionary of Military and Related Terms*, August 8, 2007, *available at* http://www.dtic.mil/doctrine/jel/doddict/data/m/03281.html (last visited March 8, 2007) (defining "mass" as "1. The concentration of combat power. 2. The military formation in which units are spaced at less than the normal distances and intervals.").

[69] AFDD 1, *supra* note 19, at 22.

[70] *See e.g*., Department of the Army, Field Manual (FM) 3-0, *Operations*, June 2001, *available at* http://www.dtic.mil/doctrine/iel/service_pubs/fm3_0a.pdf (last visited April 19, 2007) at 4-13 (discussing "mass").

[71] Department of the Army, Field Manual 1, *The Army*, June 2005, at Chapter 1, *available at* http://www.army.mil/fm1/chapter1.html (last visited April 16, 2007).

[72] *See* FM 3-0, *supra* note 69.

[73] *Id.,* at 1-2.

[74] *See generally*, Barry Straus, "Achilles: Bronze Age Warrior," *Military History Quarterly*, Autumn 2007.

[75] *See e.g.,* Department of the Army, Student Handout (SH) 21-10, *Fort Benning Standards*, June 2006, at 4, *available at* https://www.infantry.army.mil/dot/download/sh_21-10/sh_21-10.pdf (last visited February 27, 2007).

[76] *See* Headquarters Department of the Army Field Manual, 3-21.10, *The Infantry Rifle Company*, July 27, 2006, Introduction, *available at* https://atiam.train.army.mil/soldierPortal/atia/adlsc/view/public/23168-1/FM/3-21.10/chap1.htm (last visited February 27, 2007).

[77] As quoted by Paul Bedard in "Not a Bad War Book … for a Girl," *US News & World Report*, April 23, 2007, at 16, *available at* http://www.usnews.com/usnews/politics/washingtonwhispers/ (last visited April 17, 2007).

[78] *See* discussion of airpower in FM 3-24, Appendix E, para E-5, discussed in the text accompanying notes 122, *et seq.*

[79] *See e.g.*, FM 3-24, para 4-1 *supra* note 2, at 4-1 ("Ultimately, the long-term objective for both sides in that struggle remains acceptance by the people of the state or region of the legitimacy of one side's claim to political power.").

[80] *See e.g.*, FM 3-24, *supra* note 2, at A-5.

[81] *See infra* notes 218 through 257, and accompanying text.

[82] AFDD 1, *supra* note 19, at 41.

[83] For a discussion of "strategic anchoring" see Maj Gen Charles J. Dunlap, Jr., "Neo-Strategicon: Modernized Principles of War for the 21st Century," *Military Review*, March-April 2006, at 41, 44 *available at* http://www.smallwarsjournal.com/documents/milreviewmarch6.pdf (last visited March 17, 2007).

[84] National Security Council, *Highlights of the Iraq Strategy Review*, January 2007, slide 8, *available at*

http://www.whitehouse.gov/nsc/iraq/2007/iraq-strategy011007.pdf (summary briefing slides) (last visited January 29, 2007).

[85] Carl von Clausewitz, *On War* (Michael Howard and Peter Paret, ed., and trans. 1976) (1832), at 89.

[86] *See* Carl Builder, "Keeping the Strategic Flame," *Joint Force Quarterly*, Winter 1996-97, at 76 *accessible at* http://www.dtic.mil/doctrine/jel/jfq_pubs/1034.pdf (last visited March 16, 2007).

[87] *Id.*

[88] Department of Defense, *DOD Dictionary of Military and Associated Terms*, August 8, 2006, *available a*t http://www.dtic.mil/doctrine/jel/doddict/data/s/05140.html (last visited January 29, 2006).

[89] The whole notion of focusing on "will" has only recently emerged in US military thinking. *See e.g.,* RADM John G. Morgan, *et al*., "Rethinking the Principles of War," *Proceedings*, October 2003, at 36-37 ("From the individual war fighter to the resolve of a nation, will is often the deciding factor in combat and war…. It may be time to add will to the US principles of war.").

[90] *See e.g.*, AFDD 1, *supra* note 19, at 17 (discussing how airpower "if properly focused, offers our national leadership alternatives to the annihilation and attrition options" that involve "engaging the enemy in close combat to achieve a decisive battle").

[91] *See* Dunlap, *supra* note 83, at 45 (discussing "engagement dominance" as a principle of war").

[92] AFDD 2, *supra* note 50, at 21 ("air superiority is the desired state before all other combat operations … [it] provides both freedom to attack and freedom from attack.").

[93] *See generally, "*Asymmetric Warfare," *Wikipedia*, March 13, 2007, *available at* http://en.wikipedia.org/wiki/Asymmetric_warfare (last visited March 16, 2007).

[94] *See* Jeffrey Record, *The American Way of War: Cultural Barriers to Successful Counterinsurgency*, Cato Institute Policy Analysis No. 577, September 1, 2006, *available at* http://www.cato.org/pubs/pas/pa577.pdf (last visited April 15, 2007).

[95] *Id.*, at 5.

[96] James S. Corum, *Fighting the War on Terror: A Counterinsurgency Strategy* (Zenith Press, 2007). Corum is a retired Army lieutenant colonel and erstwhile professor at the Air Force's School for Advanced Airpower Studies, now a professor at the Army's Command and General Staff College.

[97] *See supra* notes 48 and 49 and accompanying text.

[98] *See supra* note 36.

[99] *See e.g.*, Corum, Chapter 2, *supra* note 96.

[100] In a scathing review of FM 3-24, retired Army officer and popular columnist Ralph Peters said:

> [FM 3-24] is morally frivolous and intellectually inert, a pathetic rehashing of yesteryear's discredited "wisdom" on counterinsurgencies and, worst of all, driven by a stalker-quality infatuation with T. E. Lawrence, "Lawrence of Arabia," who not only was a huckster of the first order, but whose "revolt in the desert" was a near-meaningless sideshow of a sideshow.

Ralph Peters, "Politically Correct War," *New York Post*, October 18, 2006, *available at* http://www.nypost.com/seven/10182006/postopinion/opedcolumnists/politically_correct_war_opedcolumnists_ralph_peters.htm?page=0 (last visited April 19, 2007).

[101] *See* "How to Predict the Future," *Military History*, April 2007, at 23.

[102] *See* AFDD 1, *supra* note 19, at 3 (discussing how doctrine is a "snapshot in time – a reflection of the thinking at the time of its creation").

[103] To the extent possible, this essay relies upon sources that appeared after the issuance of FM 3-24 in December of 2006 to help illustrate the velocity with which airpower capacities advance.

[104] *See* Stephen B. Johnson, *The United States Air Force and the Culture of Innovation* (Air University 2002) ("Since its inception the United States Air Force has depended on advanced technologies to maintain an edge over its actual and potential enemies. Continuous innovation became a way of life….")

[105] A classic example is the Mitsubishi A6M *Zero* fighter which as late as 1942 was the world's premier carrier-based aircraft only to be rendered obsolete by the introduction of such planes as the P-38 Lightning, F6F Hellcat, and P-51 Mustang. *See e.g.,* "A6M Zero," *Wikipedia*, March 18, 2007, *available at* http://en.wikipedia.org/wiki/A6M_Zero (last visited March 19, 2007).

[106] For a definition of "Moore's Law" see Moore's Law, *Webopedia*, undated, *available at* http://www.webopedia.com/TERM/M/Moores_Law.html (last visited April 2, 2007).

[107] *See* Colonel Jeffery R. Barnett, USAF, *Defeating Insurgents with Technology*, AIRPOWER JOURNAL, Summer 1996, at 69, *available at* http://www.airpower.maxwell.af.mil/airchronicles/apj/apj96/sum96/barnet t.html (last visited April 19, 2007).

[108] *See e.g.*, Department of the Air Force, "Recapitalizing and Modernizing the Force*,*" in *Air Force Posture Statement 2007*, 2007, *available at* http://www.posturestatement.hq.af.mil/4_recap.htm (last visited April 18, 2007). TSgt C. Todd Lopez, "Air Force Focused on Three Priorities," *Air Force News*, December 10, 2006, *available at* http://www.af.mil/news/story.asp?id=123027010 (last visited April 17, 2007).

[109] Paul Manson, "First Army Commander's Warrior Challenge Challenges Soldiers," *First Army News*, May 9, 2007, *available at* http://www.first.army.mil/pao/2007_Articles/050907_1ACommandersWa rriorChallenge.htm (last visited May 21, 2007) (quoting Maj David Harrington, commander, Task Force- Small Arms Readiness Group about "how much better – how much more accurate - the M-16 is to the AK-47").

[110] Bing West and Eliot Cohen, "Our Only Hope," *Wall Street Journal*, January 8, 2007, at 17, *available at* http://www.sais-jhu.edu/insider/pdf/2007_articles/cohen_wsj_010807.pdf (last visited April 20, 2007).

[111] *See e.g*., Robert S. Dudney, "The Air War Over Hezbollah," *Air Force Magazine*, Sept. 2006, *available at* http://www.afa.org/magazine/sept2006/0906edit.asp (last visited April 18, 2007).

[112] *See e.g.*, Phillip H. Gordon, "Air Power Won't Do It," *Washington Post*, July 2006, at A15, *available at* http://www.washingtonpost.com/wp-dyn/content/article/2006/07/24/AR2006072400807.html (last visited April 18, 2007).

[113] *See e.g.,* Nahum Barnea, "Think Again: Israel vs. Hezbollah," *Foreign Policy*, Nov/Dec 2006, *available at* http://www.foreignpolicy.com/users/login.php?story_id=3596&URL=http://www.foreignpolicy.com (last visited April 21, 2007).

[114] Edward Luttwak, "Again, Israeli Gloom is Misplaced," *TheFirstPost*, August 18, 2006, *available at* http://www.thefirstpost.co.uk/index.php?menuID=1&subID=688&p=4 (last visited April 18, 2007).

[115] Susan Krebs, "The 2006 Lebanon War: Lessons Learned," *Parameters*, Spring 2007, *available at* http://www.carlisle.army.mil/usawc/parameters/07spring/kreps.htm (last visited April 18, 2007).

[116] Soldiers may consider technology differently from Airmen because of the relative role tradition plays in their *Weltanschauung*. Historian Charles Townshend observes:

> Soldiers have seldom led the way in technological development, and have often been reluctant to welcome new weapons. Tradition has always been important in fostering the esprit de corps of fighting units, and can lead to fossilization.

Charles Townshend, *Oxford History of Modern* War (Oxford, 2005) at 4.

[117] *See* Fredric Smoler, "History and War: An Interview with Eliot Cohen," *AmericanHeritage.com*, March 12, 2007*, available at* http://www.americanheritage.com/articles/web/20070312-eliot-cohen-military-theory-iraq-vietnam-antietam-guerrilla-warfare-nation-building-winston-churchill-military-history-condoleezza-rice.shtml (last visited April 9, 2007).

[118] *See supra* note 44 and accompanying text.

[119] David H. Petraeus, "Lessons of History and the Lessons of Vietnam," in *Assessing the Vietnam War*, Lloyd J. Matthews & Dale E. Brown, eds., (Pergamon-Brassey, 1987), at 171, 181.

[120] Phillip Carter, "There Are Four Iraq Wars: How Many of Them Can We Win," SLATE, February 9, 2007, *available at* http://www.slate.com/id/2159460 (last visited April 18, 2007).

[121] Shankar, Vedantam, "Waging War Through The Rearview Mirror," *Washington Post*, April 9, 2007, at A3, *available at* http://www.washingtonpost.com/wp-dyn/content/article/2007/04/08/AR2007040800975.html (last visited April 9, 2007).

[122] FM 3-24, *supra* note 2, at Appendix E, para E-5.

[123] *See e.g.,* David S. Cloud, "US Reviews Afghan Claims of Civilian Toll in Airstrikes," *New York Times*, May 4, 2007, at 16, *available at* http://www.nytimes.com/2007/05/04/world/asia/04afghan.html (last visited May 29, 2007).

[124] *See supra* note 115.

[125] *See e.g.*, Col Phillip S. Meilinger, USAF (Ret.), *Airpower: Myths and Facts* (Air University, 2003) *available at* http://www.au.af.mil/au/aul/aupress/Books/Meilinger_myths/Meilinger_myths_B91.pdf (last visited April 6, 2007).

[126] Terry McCarthy, "Whatever Happened to the Republican Guard?" May 4, 2003, *Time Magazine*, *available at* http://www.time.com/time/magazine/article/0,9171,1101030512-449441,00.html (last visited March 27, 2007).

[127] It may be that the Revolution in Military Affairs' association with the disliked former secretary of defense is one reason for its faded popularity. *See e.g.,* Fred Kaplan, "Why Generals Will Fight the new secretary of the Army," May 6, 2003, SLATE, *available at* http://www.slate.com/id/2082641/ (lasted visited March 27, 2007).

[128] *See generally*, Michael Russell Rip and James Michael Hasik, *The Precision Revolution: GPS and the Future of Aerial Warfare* (Naval Institute Press, 2002).

[129] Department of the Air Force, *Litening II/ER/AT*, January 2006 (fact sheet), *available at*

http://www.af.mil/factsheets/factsheet.asp?fsID=114 (last visited March 28, 2007).

[130] *Id.*

[131] Department of the Air Force, *Sniper Advanced Targeting Pod*, March 2007 (fact sheet), *available at* http://www.af.mil/factsheets/factsheet.asp?id=7589 (last visited March 29, 2007).

[132] The weapons generally rely upon global positioning system (GPS) satellites. *See generally*, Department of the Air Force, *Global Positioning System*, March 2007 (fact sheet), *available at* http://www.af.mil/factsheets/factsheet.asp?fsID=119 (last visited March 28, 2007).

[133] *See generally*, "Precision-Guided Munitions," *Wikipedia*, February 13, 2007 *available at* http://en.wikipedia.org/wiki/Precision-guided_munition (last visited March 28, 2007).

[134] Department of the Air Force, *EC 8 Joint STARS*, October 2005 (fact sheet), *available at* http://www.af.mil/factsheets/factsheet.asp?fsID=100 (last visited April 16, 2007).

[135] "Upgrade Lets Bombs Hit Moving Targets," *Air Force Times*, January 17, 2007.

[136] Department of the Air Force, *AC-130H/U*, October 2005 (fact sheet), *available at* http://www.af.mil/factsheets/factsheet.asp?fsID=71 (last visited March 28, 2007).

[137] Department of the Air Force, *MQ-1 Predator Unmanned Aerial Vehicle,* Jan. 2007, *available at* http://www.af.mil/factsheets/factsheet.asp?fsID=122 (last visited March 28, 2007).

[138] Department of the Air Force, *GBU-39B, Small Diameter Bomb*, August 2006 (fact sheet), *available at* http://www.af.mil/factsheets/factsheet.asp?id=4500 (last visited February 4, 2007).

[139] *See* Department of the Air Force, *Lt Gen Gary L. North*, November 2006 (biography), *available at* http://www.af.mil/bios/bio.asp?bioID=6617 (last visited March 28, 2007).

[140] *See* Department of the Air Force, *"*USAFE Unit Debuts Small Diameter Bomb in Combat," October 5, 2006, American Forces Press Service, *available at* http://www.af.mil/news/story.asp?storyID=123028471 (last visited February 4. 2007).

[141] *See* Department of Defense, *Small Diameter Bomb Provides Big Capabilities*, March 24, 2006, *available at* http://www.defenselink.mil/transformation/articles/2006-03/ta032406b.html (last visited February 4, 2007).

[142] David A. Fulghum, "Technology Will Be Key to Iraq Buildup," *Aviation Week and Space Technology*, January 14, 2007, *available at* http://www.aviationweek.com/aw/generic/story_channel.jsp?channel=defense&id=news/aw011507p2.xml (last visited April 17, 2007).

[143] AOCs are generally described in AFDD 2, *supra* note 50, at Chapter 7.

[144] For a concise and current discussion of how these processes coalesce to minimize collateral damage, *see* Professor Colin Kahl, *Rules of Engagement: Norms, Civilian Casualties, and US Conduct in Iraq*, 1 April 2007 (paper prepared for the Lone Star National Security Forum, Austin, TX, March 30-1 April 2007 on file with the author).

[145] Michael Sirak, "Air Force, Lockheed Martin Lay Out Plan for Modernizing Air Operations Centers," *Defense Daily*, January 23, 2007, at 3, *available at* http://integrator.hanscom.af.mil/2007/January/01252007/01252007-19.htm (last visited May 29, 2007) (quoting John Mengucci, a Lockheed Martin official).

[146] Department of the Air Force, *Battlefield Airmen*, November 2006 (fact sheet), *available at* http://www.af.mil/factsheets/factsheet.asp?id=187 (last visited April 6, 2007).

[147] *Id.*

[148] Caitlin Harrington, "Interview: Michael Wynne, US Secretary of the Air Force," *Jane's Defence Weekly*, March 28, 2007, at 34 *available at* http://integrator.hanscom.af.mil/2007/March/03292007/03292007-18.htm (last visited April 6, 2007).

[149] Tom Vanden Brook, "Bombing Campaign Intensifies in Afghanistan," *USA Today*, February 9, 2007, at 9, *available at* http://www.usatoday.com/news/world/2007-02-08-afghan-air-war_x.htm (last visited May 21, 2007).

[150] Col Howard D. Belote, USAF, "Counterinsurgency Airpower," *Air & Space Power Journal*, Fall 2006, *available at* http://www.airpower.maxwell.af.mil/airchronicles/apj/apj06/fal06/belote.html (last visited May 14, 2007).

[151] *See* Human Rights Watch, *Off Target: The Conduct of War and Civilian Casualties*, December 2003, at 20 *available at* http://www.hrw.org/reports/2003/usa1203/usa1203.pdf (last visited 24 March 2007).

[152] William M. Arkin, "Shock and Awe Worked, God Help Us," *WashingtonPost.com*, March 19, 2007, *available at* http://blog.washingtonpost.com/earlywarning/2007/03/shock_and_awe_worked_god_help.html (last visited April 15, 2007).

[153] *Id.*

[154] *Id. See also*, Jeff Emanuel, "'I Love Those Guys'," *Wall Street Journal*, OPINIONJOURNAL.COM, May 23, 2007, *available at* http://www.opinionjournal.com/federation/feature/?id=110010083&mod=RSS_Opinion_Journal&ojrss=frontpage (last visited May 28, 2007) ("Embedded journalists in Iraq are having their minds changed left and right by US soldiers.").

[155] *Id.*

[156] This is a difficult issue of modern war. Gen Wesley Clark, USA (Ret.) observes that during the Operation Allied Force the Serbs had the immediate advantage with the world media in collateral damage incidents because they were "on the ground" and knew more than did NATO forces. *See* Wesley Clark, *Waging Modern War* (PublicAffairs, 2001) at 443.

[157] *Id.*

[158] *See* Eric V. Larson and Bogdan Savych, *Misfortunes of War: Press and Public Reactions to Civilian Deaths in Wartime* (RAND, 2007), at 18, *available at* http://www.rand.org/pubs/monographs/MG441/ (last visited April 6, 2007).

[159] *Id.*, at 209.

[160] Fouad Ajami, "Through Arab Eyes Blindly," *US News & World Report*, April 14, 2003, *available* at http://www.usnews.com/usnews/news/articles/030414/14fouad.htm (last visited April 6, 2007).

[161] *Id*.

[162] Mackubin Thomas Owens, "Men@war: Haditha in Context," May 30, 2006, NATIONALREVIEWONLINe, *available at* http://article.nationalreview.com/?q=MGFjZGFhZGJjYWM0NTJlM2IzM jAxM2I4NDEwYWM5NWI= (last visited March 26, 2007).

[163] US Marine Corps, *Iraq Investigations*, March 26, 2007, *available at* http://www.usmc.mil/lapa/iraq-investigations.htm (last visited March 26, 2007) (discussing Haditha and Hamdania cases).

[164] *See* "Iraq Murder Leads to Soldier's Guilty Plea," March 21, 2007, CNN.COM, *available at* http://www.usatoday.com/news/nation/2007-03-21-guilty-plea_N.htm (last visited March 26, 2007) (discussing one case arising out of a 2006 incident where five soldiers were charged in the rape of Abeer Qassim al-Janabi and the killings of her, her parents, and her younger sister).

[165] Tom Brokaw, *Gen Sanchez: Abu Ghraib 'clearly a defeat'*, June 30, 2004 *available at* http://www.msnbc.msn.com/id/5333895/ (last visited March 27, 2007).

[166] *See e.g.*, LTC Dean Bland, USA, *The Abu Ghraib Scandal: Impact on the Army Profession and the Intelligence Process*, US Army War College Strategy Research Project, March 18, 2005, *available at* http://www.strategicstudiesinstitute.army.mil/pdffiles/ksil262.pdf (last visited April 6, 2007).

[167] Dinesh D'Sousa, "Rethinking Abu Ghraib," Townhall.com, February 26, 2007, *available at* http://www.townhall.com/columnists/DineshDSouza/2007/02/26/rethinkin g_abu_ghraib (last visited April 6, 2007)

[168] *See* FM 3-24, Chapter 7, *supra* note 2.

[169] *See e.g.,* FM 3-24, para 3-137, *Id*.

[170] Stephen Ambrose, *Americans at War* (University Press of Mississippi, 1997), at 152.

[171] Ambrose, *supra* note 170, at 154.

[172] *See generally* MNF-I, *Terrorist Tactics*, January 4, 2007, *available at* http://www.mnf-iraq.com/index.php?option=com_content&task=view&id=727&Itemid=44 (last visited April 16, 2007), and Congressional Research Service, *Improvised Explosive Devices (IEDs) in Iraq: Effects and Countermeasures*, February 10, 2006, Library of Congress, *available at* http://stinet.dtic.mil/oai/oai?&verb=getRecord&metadataPrefix=html&identifier=ADA454399 (last visited April 16, 2007).

[173] Brad Knickerbocker, "Is Military Justice in Iraq changing for the Better?" *Christian Science Monitor*, August 7, 2007, at 1, *available at* http://www.csmonitor.com/2007/0807/p01s04-usmi.html?page=1 (last visited August 7, 2007).

[174] *See supra* note 44, and accompanying text.

[175] Thomas E. Ricks, "Gen. Petraeus Warns Against Using Torture," *Washington Post*, May 11, 2007, at A03, *available at* http://www.washingtonpost.com/wp-dyn/content/article/2007/05/10/AR2007051001963.html (last visited May 19, 2007).

[176] Department of Defense, *DOD News Briefing with Assistant Secretary Casscells from the Pentagon*, May 4, 2007 (news transcript) *available at* http://www.defenselink.mil/transcripts/transcript.aspx?transcriptid=3958 (last visited May 19, 2007). The report itself, Mental Health Advisory Team (MHAT) IV, *Operation Iraqi Freedom 05-07, Final Report*, November 17, 2006, (Office of the Surgeon, Multi-National Force-Iraq and the Office of the Surgeon General, US Army Medical Command) *is available at* http://www.armymedicine.army.mil/news/mhat/mhat_iv/mhat-iv.cfm (last visited May 19, 2007).

[177] Josh White, "Report on Haditha Condemns Marines," *Washington Post*, April 21, 2007, at 1, *available at* http://www.washingtonpost.com/wp-dyn/content/article/2007/04/20/AR2007042002308.html (last visited April 21, 2007).

[178] *Id.*

[179] William Thomas Allison, *Military Justice in Vietnam: The Rule of Law in American War* (University of Kansas Press, 2007), at 92 (italics added).

[180] Ann Scott Tyson and Josh White, "Marines Killed Civilians, US Says, *Washington Post*, April 15, 2007, at A01, *available at* http://www.washingtonpost.com/wp-dyn/content/article/2007/04/14/AR2007041400603.html (last visited April 15, 2007).

[181] *Id.*

[182] *Id.*

[183] Air Force members have a significantly lower rate of drug an alcohol abuse relative to the Army and Marine Corps. *See* Department of Defense, *Survey of Health Related Behaviors Among Active Duty Military Personnel, 2005*, at 70, 233, *available at* (last visited April 18, 2007)

[184] AFDD 1, at 5, *supra* note 19.

[185] Benjamin Lambeth, *Air Power Against Terror: America's Conduct of Operation Enduring Freedom* (Rand, 2005), at 324 *available at* http://www.rand.org/pubs/monographs/2006/RAND_MG166-1.pdf (last visited April 6, 2007).

[186] "Military doctrine presents considerations on how a job should be done to accomplish military goals." *See* AFDD 1, *supra* note 19, at 11.

[187] *See supra* note 52 and accompanying text for a discussion about airmindedness.

[188] Steven Metz and Raymond Millen, *Insurgency and Counterinsurgency in the 21st Century: Reconceptualizing Threat and Response*, US Army Strategic Studies Institute, November 2004 (monograph), at vii and 25-26, *available at* http://www.au.af.mil/au/awc/awcgate/ssi/insurgency21c.pdf (last visited May 23, 2007).

[189] Colonel Joseph D. Celeski, US Army, Retired, "Strategic Aspects of Counterinsurgency," *Military Review*, March-April 2006, *available at* (http://usacac.army.mil/CAC/milreview/English/MarApr06/Celeski.pdf (last visited March 9, 2007).

[190] *Compare*, Maj Richard E. Porter, "Correlation of Forces," *Air University Review*, March-April 1977, *available at*

http://www.airpower.maxwell.af.mil/airchronicles/aureview/1977/mar-apr/porter.html (last visited August 8, 2007).

[191] Cesar G. Soriano and Steven Komarow, "Poll: Iraqis Out of Patience," *USA Today* (online), April 28, 2004, *available at* http://www.usatoday.com/news/world/iraq/2004-04-28-poll-cover_x.htm (last visited April 9, 2007).

[192] David Kilcullen, "Counter-insurgency Redux," *Survival*, Winter 2006-07, at 11, 113, *available at* http://www.smallwarsjournal.com/documents/kilcullen1.pdf (last visited April 20, 2007). Others call this a "liberation" insurgency. *See* Metz and Millen, *supra* note 188.

[193] *As quoted by* Bob Woodward in *State of Denial* (Simon & Schuster, 2006), at 263.

[194] Raphael Patai, THE ARAB MIND (1983) (Hatherleigh Press ed., 2002) at 98.

[195] *Compare,* Bernard Lewis, *What Went Wrong?* (Perennial, 2002).

[196] *Id.*, at 151.

[197] *Id.*, at 153.

[198] Edward Luttwak, "Dead End: Counterinsurgency Warfare as Military Malpractice," *Harper's Magazine*, February 2007, at 33, *available at* http://www.harpers.org/archive/2007/02/0081384 (last visited April 19, 2007).

[199] Yossef Bodansky, *The Secret History of the Iraq War* (Regan Books, 2004), at 477.

[200] Diana West, "Petraeus and PC-Policy-Making," *Washington Times*, May 18, 2007, at 19, *available at* http://www.washtimes.com/op-ed/dwest.htm (May 18, 2007).

[201] *Id.*

[202] British Broadcasting Corporation, *BBC News poll: Optimism fades in Iraq*, Press release, March 19, 2007, *available at* http://www.bbc.co.uk/pressoffice/pressreleases/stories/2007/03_march/19/iraq.shtml (last visited April 9, 2007).

[203] World Public Opinion.org, *Most Iraqis Want US Troops Out Within a Year*, September 27, 2006 *available at* http://www.worldpublicopinion.org/pipa/articles/brmiddleeastnafricara/250.php?nid=&id=&pnt=250&lb=brme (last visited January 18, 2007).

[204] *See* FM 3-24, *supra* note 2, at 1-157.

[205] General Charles C. Krulak, "The Strategic Corporal: Leadership in the Three-Block War," *Marines Magazine*, January 1999, *available at* www.au.af.mil/au/awc/awcgate/usmc/strategic_corporal.htm (last visited April 9, 2007).

[206] The officer was Maj Gen Edward G. Lansdale. *See* Department of the Air Force, *Major General Edward G. Lansdale*, (biography), October 1962, *available at* http://www.af.mil/bios/bio.asp?bioID=6141 (last visited April 21, 2007).

[207] John J. Tierney, Jr., "Can a Popular Insurgency Be Defeated?" *Military History*, March 2007, at 54, 57.

[208] Lt Col (P) Craig T. Trebilcock, "The Modern Seven Pillars of Iraq," *Army Magazine*, February 2007, at 25, 33, *available at* http://www.ausa.org/pdfdocs/ArmyMag/Feb07/Trebilcock.pdf (last visited April 16, 2007).

[209] Richard Lardner, "Message-Minded Admiral Ditches 'Long War' Phrase," *Tampa Tribune*, April 19, 2007, at 1, *available at* http://www.tbo.com/news/metro/MGBJ65IOO0F.html (last visited April 19, 2007).

[210] This is distinct from the Maoist concept of protracted war. *See* Karl P. Magyar, Preface, *in Prolonged Wars*, Drs. Karl P. Magyar and Constantine P. Danopoulos, eds., (Air University Press, 1994, 2005), at *v*, *available at* http://aupress.au.af.mil/Books/Magyar_Prolonged_B59/Magyar_Prolonged.pdf (last visited April 19, 2007).

[211] *See* Department of Defense, *Quadrennial Defense Review Report*, February 6, 2006, at V, *available at* http://www.defenselink.mil/qdr (last visited April 9, 2007).

[212] *See e.g.*, FM 3-24, *supra* note 2, at para 1-134. *See also*, Jim Michaels, "Insurgencies Like Iraq's Usually Last 10 Years But Fail, Study Says," *USA Today*, May 9, 2007, at 8, *available at* http://www.usatoday.com/news/world/iraq/2007-05-08-insurgency-report_N.htm (last visited May 29, 2007).

[213] According to, Col Thomas X. Hammes USMC (Ret.):

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> [An] unchanging aspect of insurgency involves
> duration. Insurgencies are measured in decades, not months
> or years. The Chinese Communists fought for 27 years.
> Vietnamese fought the US for 30 years. Palestinians have
> been resisting Israel since at least 1968. Even when the
> counterinsurgent has won, it has taken a long time. The
> Malaya Emergency and the El Salvadoran insurgency each
> lasted 12 years.

Col Thomas X. Hammes, "Countering Evolved Insurgent Networks," *Military Review*, July-August 2006, at 18, 19, *available at* http://usacac.leavenworth.army.mil/CAC/milreview/English/JulAug06/Hammes.pdf (last visited May 21, 2007).

[214] *See e.g.*, Dan Balz and Jon Cohen, "Majority in Poll Favor Deadline for Iraq Pullout," *Washington Post*, February 27, 2007, at A01, *available at* http://www.washingtonpost.com/wp-dyn/content/article/2007/02/26/AR2007022600313.html (last visited April 18, 2007).

[215] Herschel Smith, "Non Cents," *Small Wars Journal*, May 23, 2007, (blog) *available at* http://smallwarsjournal.com/blog/2007/05/non-cents-1/ (last visited May 24, 2007).

[216] *Compare*, AFDD 1, *supra* note 19, at 21 (discussing "objective" as a principle of war and remarking that it is concerned "directing military operations toward a defined and attainable objective that contributes to strategic, operational, and tactical aims").

[217] According to Fareed Zakaria:

> Most important, we need to find a strategy whose costs
> are sustainable. Militarily this means drawing down our
> forces to around 60,000 troops and concentrating on Al
> Qaeda in Anbar province.

Fareed Zakaria, "The Surge that Might Work," *Newsweek*, March 5, 2007, *available at* http://www.msnbc.msn.com/id/17316434/site/newsweek (last visited April 19, 2007).

[218] Wesley K. Clark, *Winning Modern Wars* (Public Affairs, 2003), at 165.

[219] *Id.*

[220] Sarah Sewall, "Modernizing US Counterinsurgency Practice: Rethinking Risk and Developing a National Strategy," *Military Review*, September-October 2006, at 103, *available at* http://www.ksg.harvard.edu/cchrp/Sewall%20-%20military%20review%2010_2006.pdf (last visited March 9, 2007).

[221] Rowan Scarborough, *US Suffers Higher Casualties in Iraq*, Examiner.com, April 9, 2007 *available at* http://www.examiner.com/a-664351~U_S__suffering_higher_casualties_in_Iraq.html (last visited April 14, 2007).

[222] Centers of gravity are "the source of power that provides moral or physical strength, freedom of action, physical strength, or will to act." Joint Chiefs of Staff, Joint Pub 1-02, *DOD Dictionary of Military and Associated Terms*, 12 APRIL 2001, as amended through March 22, 2007 *available at* http://www.dtic.mil/doctrine/jel/new_pubs/jp1_02.pdf (last visited April 20, 2007).

[223] *Id.*

[224] *See also supra* notes 152 through 156 and accompanying text.

[225] Ellen Ratner, *Embed or in bed?*, WorldNetDaily, April 4, 2003, *available at* http://www.worldnetdaily.com/news/article.asp?ARTICLE_ID=31878 (last visited April 14, 2007).

[226] *See e.g.*, Martha Raddatz, *The Long Road Home: A Story of War and Family* (Putnam, 2007).

[227] *See e.g.,* "Voices of the Fallen," *Newsweek*, April 2, 2007, *available at* http://www.msnbc.msn.com/id/17773294/site/newsweek (last visited April 14, 2007) (entire issue devoted to letters and other words of deceased servicemembers) and Michael Duffy, Brian Bennett, and Mark Kukis, "One Day in Iraq," *Time*, June 4, 2007, at 27 *available at* http://www.time.com/time/magazine/article/0,9171,1625197,00.html (last visited May 28, 2007) ("An intimate look at the lives of six American service-members killed in April—and how their families are facing life without them.").

[228] *See e.g., American Heroes*, CBSNEWS.COM, *available at* http://www.cbsnews.com/htdocs/america_at_war/fallen_heroes/framesour ce.html (last visited April 14, 2007).

[229] *See e.g.*, Bill Carter, "Debate Over 'Nightline' Tribute to War Dead Grows, as McCain Weighs In," *New York Times*, May 1, 2004, *available at* http://query.nytimes.com/gst/fullpage.html?res=9504E2DC153DF932A35 756C0A9629C8B63 (last visited April 14, 2007).

[230] Christopher Gelpi, Peter D. Feaver, and Jason Reifler, "Success Matters: Casualty Sensitivity and the War in Iraq," *International Security*, Winter 2005, at 7, 44-45 *available at* http://bcsia.ksg.harvard.edu/BCSIA_content_stage/documents/IS3003_pp 007-046.pdf (last visited April 14, 2007).

[231] *Less than Half of Americans Think US Can Win in Iraq*, CNN.COM, March 13, 2007, *available at* http://www.cnn.com/2007/POLITICS/03/13/iraq.poll/index.html (last visited April 15, 2007).

[232] Dalia Sussman, "Poll Shows View of Iraq War is Most Negative Since Start," *New York Times*, May 25, 2007, at 16, *available at* http://www.nytimes.com/2007/05/25/washington/25view.html?_r=1&oref =slogin (last visited May 25, 2007).

[233] Susan Page, "Anti-War Views On Iraq Rise to Record," *USA Today*, July 10, 2007, at 1, *available at* http://www.usatoday.com/printedition/news/20070710/1a_lede10.art.htm (last visited August 6, 2007).

[234] Gen Barry M. McCaffrey, *After Action Report: Visit Iraq and Kuwait 9-16 March*, March 26, 2007, at 4, *available at* http://www.iraqslogger.com/downloads/McCaffreyIraq.pdf (last visited April 16, 2007).

[235] Robert Hodierne, "Poll: More Troops Unhappy with Bush Course in Iraq," January 6, 2007, *Army Times*, *available at* http://www.armytimes.com/news/2006/12/tns.troopspol06l1229/ (last visited April 11, 2007). *See also*, Michael Kamber, "As Allies Turn Foe, Disillusion Rises in Some GI's," *New York Times*, May 28, 2007, at 1, *available at*

http://www.nytimes.com/2007/05/28/world/middleeast/28delta.html (last visited May 28, 2007).

[236] *See* Sewall, *supra* note 220, and accompanying text.

[237] McCaffrey, *supra* note 234, at 5.

[238] Laura King, "Iraq Security Sweep to be Extended to Mosul," *Los Angeles Times*, April 5, 2007, *available at* http://www.latimes.com/news/nationworld/world/la-fg-iraq5apr05,1,1135149.story?coll=la-headlines-world&ctrack=1&cset=true (last visited April 16, 2007).

[239] Joshua Partlow, "Soldiers Shift To Baghdad Outposts," *Washington Post*, March 1, 2007, at 1, *available at* http://www.washingtonpost.com/wp-dyn/content/article/2007/02/28/AR2007022802217.html (last visited April 16, 2007).

[240] "McCain Says Iraq Could See Tet-Like Attack," *USA Today*, February 13, 2007, at 6.

[241] Lt Gen Phillip B. Davidson, USA (Ret.), *Vietnam at War* (Presidio, 1988), at 485.

[242] FM 3-24, *supra* note 2, at para 2-42.

[243] Gen Barry McCaffrey, *Opening Remarks*, Military Officers Association of America, Military Professionals Symposium, November 16, 2006, *available at* http://www.moaa.org/serv_prof_symposium_061116_transcript.htm#5 (last visited January 15, 2007).

[244] *See e.g.*, Tom Vanden Brook, "Older Recruits Find Less Success in the Army*,"* February 19, 2007, *available at* http://www.usatoday.com/news/world/2007-02-19-oldsoldier_x.htm (last visited March 18, 2007) ("Older recruits are washing out of the Army at nearly twice the rate of all new soldiers.").

[245] David S. Cloud, "Army Misses Its June Goal for New Recruits," *New York Times*, July 10, 2007, at 14, *available at* http://www.nytimes.com/2007/07/10/washington/10military.html (last visited August 6, 2007).

[246] Haya El Nasser, "Recruits Fitness Weighs on Military," *USA Today*, March 30 – April 1, 2007, at 1A, *available at* http://www.usatoday.com/news/nation/2007-03-29-recruits-fitness_N.htm

(last visited April 2007) (noting that the number of Army applicants who were obese doubled from 1995 to 2005).

[247] Brian Mockenhaupt, "The Army We Have," *The Atlantic*, June 2007, at 86, 89.

[248] Megan Scully, *Marine Corps Chief Says Building a Bigger Force Will Be Tough*, GovExec.com, March 13, 2007, *available at* http://www.govexec.com/story_page.cfm?articleid=36346&dcn=e_gvet (last visited April 18, 2007).

[249] Tom Vanden Brook, "Officer Shortage Looming in Army," *USA Today*, March 12, 2007, at 1, *available at* http://www.usatoday.com/news/washington/2007-03-12-officer-shortage_N.htm (last visited August 6, 2007) and Faye Fiore, "Army's Middle Ranks are Dwindling," *Los Angeles Times*, July 16, 2007, available at http://www.latimes.com/news/nationworld/nation/la-na-sergeants16jul16,1,1055842.story?track=rss&ctrack=1&cset=true (last visited August 6, 2007).

[250] Mockenhaupt, *supra* note 247, at 99.

[251] *See e.g.*, Tom Vanden Brook, "Army Pays $1 Billion to Recruit and Retain Soldiers," *USA Today*, April 12, 2007, at 8, *available at* http://www.usatoday.com/news/washington/2007-04-11-military-bonuses_n.htm (last visited May 29, 2007).

[252] *See supra* note 242 and accompanying text.

[253] *See generally*, Kathy Roth-Douquet and Frank Schaeffer, *AWOL: The Unexcused Absence of America's Upper Classes from Military Service and How It Hurts Our Country* (HarperCollins, 2006). *See also*, Gordon Lubold, "Few Americans Share Iraq War's Sacrifices," *Christian Science Monitor*, March 26, 2007, at 1 *available at* http://www.csmonitor.com/2007/0326/p01s01-ussc.html (last visited May 29, 2007).

[254] *See* Jim Garamone, *DOD Official Cites Success of All-Volunteer Force*, American Forces Press Service, November 20, 2006, *available at* http://www.defenselink.mil/news/newsarticle.aspx?id=2181 (last visited April 17, 2007).

[255] *See supra* note 242 and accompanying text.

[256] *See generally*, Lt Col Richard A. Lacquement, Jr. USA, "The Casualty-Aversion Myth," *Naval War College Review*, Winter 2004, at 39,

available at http://www.nwc.navy.mil/press/Review/2004/Winter/art4-w04.htm (last visited March 9, 2007).

[257] Record, *supra* note 94, at 1.

[258] Rory Stewart, "Where Less Is More," *New York Times*, July 23, 2007, at 19, *available at* http://www.nytimes.com/2007/07/23/opinion/23stewart.html?ex=1186632000&en=2ba85567fcefb72a&ei=5070 (last visited August 7, 2007).

[259] Maj Jon Huss, "Exploiting the Psychological Effects of Airpower," *Aerospace Power Journal*, Winter 1999, at 23 *available at* http://www.airpower.maxwell.af.mil/airchronicles/apj/apj99/win99/huss.htm (last visited May 29, 2007).

[260] *See* Stephen Tanner, *Afghanistan: A Military History from Alexander the Great to the Fall of the Taliban* (Da Capo, 2002), at 267.

[261] *See* Timothy Gusinov, "Afghan War Has Lessons for US Pilots in Iraq," *Washington Times*, February 21, 2007, at 14 *available at* http://washingtontimes.com/world/20070220-101833-6911r_page2.htm (last visited April 18, 2007).

[262] *See* Edward B. Westermann, *The Limits of Soviet Airpower: The Bear Versus the Mujahadeen in Afghanistan, 1979-1989*, School of Advanced Airpower Studies, June 1997, at 78-79, *available at* http://stinet.dtic.mil/cgi-bin/GetTRDoc?AD=ADA391797&Location=U2&doc=GetTRDoc.pdf (last visited April 14, 2007).

[263] *See generally supra* note 146 and accompanying text.

[264] Gen Tommy Franks, *American Soldier* (Regan Books, 2004), at 308.

[265] Barry Bearak, "A Nation Challenged: Death on the Ground," *New York Times*, October 13, 2001, at B01.

[266] Franks, *supra* note 264, at 312.

[267] *See supra* note 91 and accompanying text.

[268] Richard Holmes, *Acts of War: The Behavior of Men in Battle* (Free Press, 1985), at 227.

[269] J.B. Glubb, "Air and Ground Forces in Punitive Expeditions," *Journal Royal United Service Institution (JRUSI)*, August 1926, at 782 as quoted in Maj Michael A. Longoria, *A Historical View of Air Policing: Lessons from the British Experience between the Wars*, *1919-39*, June

1993, at 23, *available at*
http://www.maxwell.af.mil/au/aul/aupress/SAAS_Theses/SAASS_Out/Lo
ngoria/longoria.pdf (last visited April 9, 2007) (thesis submitted to the US
Air Force School for Advanced Airpower Studies).

[270] Maj Huss contends that air operations should be "designed to
convince enemy forces of four truths": "1. Their defenses are useless. . . .
2. If they move, operate, or remain with their equipment and/or weapons,
they will be targeted and killed. . . . 3. They will receive no rest from the
bombing [and] 4. The worst is yet to come." Huss, *supra* note 259, at 32.

[271] *See* Bruce Rolfsen, "Reaper Squadron Greets First UAV," *Air
Force Times*, March 26, 2007, at 26 (discussing the possible deployment
of the weapon to Iraq and Afghanistan).

[272] Department of the Air Force, *MQ9 Reaper Unmanned Aerial
Vehicle,* January 2007 (fact sheet), *available at*
http://www.af.mil/factsheets/factsheet.asp?fsID=6405 (last visited April
17, 2007).

[273] Charles J. Hanley, "Fear the Reaper," *Washington Times*, July 16,
2007, at 1, *available at*
http://www.washingtontimes.com/apps/pbcs.dll/article?AID=/20070716/F
OREIGN/107160055/1001 (last visited August 6, 2007).

[274] FM 3-24, *supra* note 2, at para 5-51.

[275] *See* Jim Garamone, *Gates Says No "D-Day' for Troop Surge into
Iraq*, American Forces Information Service, Jan. 7, 2007, *available at*
http://www.defenselink.mil/news/newsarticle.aspx?id=2660 (last visited
April 4, 2007).

[276] *See* Garrett Therolf, "In Baghdad, Fighting Their 'Alamo'," *Los
Angeles Times*, May 23, 2007, at 1, *available at*
http://www.latimes.com/news/nationworld/iraq/la-fg-
surge23may23,0,48591.story?coll=la-home-center (last visited May 23,
2007) (discussing the difficulty of moving "beyond the clear stage").

[277] *See supra* note 202 and accompanying text.

[278] "The New Iraq Justice Center," *Washington Times*, April 10, 2007,
at A14 (editorial).

[279] Some innovative US officers are already attempting to create such
modestly-sized but self-sustaining "gated communities." *See* Greg Jaffe,

"In Iraq, An Officer's Answer to Violence: Build a Wall," *Wall Street Journal*, April 5, 2007, at 1.

[280] The Iraq Study Group concluded that job creation was "essential." See James A. Baker, II, and Lee H. Hamilton, *The Iraq Study Group Report* (Vintage, 2006), at 86 *available at* http://www.usip.org/isg/iraq_study_group_report/report/1206/iraq_study_group_report.pdf (last visited April 18, 2007).

[281] Barbara Slavin, "Giant US Embassy Rising in Baghdad," *USA Today*, April 19, 2006, *available at* http://www.usatoday.com/news/world/iraq/2006-04-19-us-embassy_x.htm (last visited April 18, 2007).

[282] Andrew F. Krepinevich, Jr., "How to Win in Iraq," *Foreign Affairs*, Sep/Oct 2005, *available at* http://www.foreignaffairs.org/20050901faessay84508/andrew-f-krepinevich-jr/how-to-win-in-iraq.html (last visited April 18, 2007).

[283] Dr. Richard B. Andres, *Winning the War in Iraq: The Indirect Approach*, October 2006, Air University White Paper (copy on file with the author), at 6.

[284] Captain John W. Bellflower, USAF, "The Indirect Approach," *Armed Forces Journal*, January 2007, *available at* http://www.armedforcesjournal.com/2007/01/2371536 (last visited April 20, 2007).

[285] David Galula, *Counterinsurgency Warfare* (Praeger, 1964, 2005 reprint), at 79.

[286] *See* Austin Long, *On "Other War": Lessons from Five Decades of RAND Counterinsurgency Research*, (RAND, 2006), at 52-54, *available at* http://www.rand.org/pubs/monographs/2006/RAND_MG482.pdf (last visited April 18, 2007).

[287] New technology and lower costs are increasing the viability of wind turbine power. *See e.g*., Jennifer Alsever, "A Nice Stiff Breeze, and a Nice Little Power Bill," *New York Times*, April 1, 2007, at B26, *available at* http://www.nytimes.com/2007/04/01/business/yourmoney/01wind.html?ex=1333080000&en=098d15c68aedac51&ei=5088&partner=rssnyt&emc=rss (last visited May 21, 2007).

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[288] *See e.g.*, William M. Welch, "Air Force Embraces Solar Power," *USA Today*, April 17, 2007, *available at* http://www.usatoday.com/tech/science/2007-04-17-air-force-solar-power_N.htm?csp=34 (last visited April 21, 2007).

[289] McCaffrey, *supra* note 234, at 6.

[290] *See* TSgt Scott T. Sturkol, "JPADS Continues 'Revolution in Airdrop Technology'," *Air Force News*, Jan. 18, 2007, *available at* http://www.af.mil/news/story.asp?storyID=123037942 (last visited February 12, 2007).

[291] *See* US Army Research, Development and Engineering Command, "Airdrop/Aerial Delivery," in *Natick Soldier Center: The Science Behind the Warrior*, May 2006, at 3, *available at* http://www.ssc.army.mil/soldier/media/print/NSC_Brochure_5-15-06.pdf (last visited February 12, 2007).

[292] *See* Erin Crawley, *Air Force Research Provides Seeds to High-Tech Cargo Delivery System,* Air Force Office of Scientific Research Public Affairs, *available at* http://www.afosr.af.mil/News/nr_2007_01_JPADS.htm (last visited February 12, 2007).

[293] *See infra* notes 394-397 and accompanying text.

[294] Tom Vanden Brook, "'Smart Airdrops' May Save Lives of US Troops," *USA Today*, Jan. 8, 2007, *available at* http://www.usatoday.com/news/world/iraq/2007-01-07-chute_x.htm (last visited February 12, 2007).

[295] Maj Dan DeVoe *as quoted by* Sturkol, *supra* note 290.

[296] *See* Department of the Air Force, *Today's Security Forces Are Expeditionary Combat Airmen*, November 29, 2006, American Forces Press Service, *available at* http://www.af.mil/news/story.asp?storyID=123033104 (last visited February 4, 2007).

[297] "The security environment requires that deployed military units, forward-based activities, and forward operating bases protect themselves against threats designed to interrupt, interfere, or impair the effectiveness of Joint operations." *See* Joint Chiefs of Staff, Joint Publication 3-10, *Joint Security Operation in Theater*, August 1, 2006, at vii *available at*

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